

# **Expert Evidence, Juries and the Search for Truth: A Case Study Analysis**

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I confirm that the work submitted is my own. I confirm that appropriate credit has been given within the thesis where reference has been made to the work of others.

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## Abstract

One of the cornerstones of our society of which we are rightly proud is the criminal justice system. However, as with any system it is not without its flaws. Over the last 30-40 years there have been a number of miscarriages of justice involving flawed or misused expert evidence. This thesis attempts to answer the question *“Does the situation with regard to the admissibility and presentation of expert evidence inhibit the courts from assessing such evidence in a rational manner, and does the system prevent the use and admission of expert evidence within the criminal justice system that could properly support the jury in reaching a just outcome?”*

The selected approach is a mixed methodology utilising doctrinal analysis, socio-legal, and comparative law approaches within a case study framework.

The thesis reviews the Law Commission consultation paper and report on expert evidence, concluding that despite the failure to legislate the recommended statutory reliability test, the move to better control expert testimony by way of the criminal procedure rules (CrimPR) is a significant step forward, while noting that the failure to consider other aspects of admissibility represents something of a missed opportunity.

Consideration is given as to how the jury analyses evidence to reach a verdict, with discussion as to possible external influences and the effect of bias on the part of both the jury and the presenting experts. Consideration is also given to approaches which may better enable the jury and the court to both comprehend expert evidence and reach a rational verdict. The thesis posits that concurrent evidence and judge-only trials may provide mechanisms to better manage expert evidence before the courts.

In respect of eyewitness and earwitness evidence, it is argued that juries are in some cases being deprived of expert testimony as to the wide disparity between ‘common-sense perception’ and current science. As such, the jury is deprived of expert opinion that may better enable its decision-making. The recommendation is made that both the *Turnbull* direction given in visual identification cases, and the modified *Turnbull*

direction given in the case of voice identification, need a more nuanced approach to better reflect the current situation. It is also recommended that with regard to earwitness testimony, not only does lay identification evidence require expert input, but the courts should follow the lead of the Northern Ireland Court of Appeal and mandate the use of more robust techniques for voice identification.

The penultimate chapter considers the possibility of polygraph evidence being used in criminal trials. There is evidence that a properly conducted polygraph is between 70% and 90% accurate. Evidence from the field of human psychology is that, in the absence of corroborating information, human beings do little better than chance when determining truth from lies. The thesis argues that it is illogical to ignore the possibility of using the more reliable form of evidence in favour of the less reliable, and that there is little English case law to prevent the use of polygraph evidence. It is argued that there is a route by which polygraph evidence could be brought before the courts and considers the possibility of legislation to this effect.

The thesis closes by making a number of recommendations for further study/reform.

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Part of the work in Chapter 7 of the thesis has appeared in the *Journal of Criminal Law* and in *Blackstones Quarterly* as follows: Elton J 'The Polygraph in the English Courts: A Creeping Inevitability or a Step Too Far?' (2017) 81 *Journal of Criminal Law* 66; and Hirst M and Elton J 'False Memories and Expert Evidence: Reliability and Admissibility' *Blackstone's Criminal Practice Quarterly Update* Issue 1 Autumn 2014, 9

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Constitution of the United States of America

### **India**

The Constitution of India



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### **United States**

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Military Rules of Evidence

New Mexico Rules of Evidence

### **Draft Legislation – England and Wales**

Domestic Abuse Bill 2018

## Chapter 1

### 1.0 Introduction

In criminal cases, trial by jury, the often mentioned ‘twelve good men and true’, is a cornerstone of the English legal system. For a jury of one’s peers to consider and weigh the evidence presented and then reach a rational – and hopefully correct – outcome must be the objective of any jury trial.

In making the determination as to guilt or otherwise, the court, and thus the jury, rely upon evidence of fact such as testimony, documents, and other exhibits. It is the place of the jury (where there is one) to interpret this evidence and, in the case of circumstantial evidence, to draw inferences from it.

Lay witnesses must generally give accounts only of facts that they have directly witnessed. Anything else is either hearsay or non-expert opinion, and neither form of evidence is generally admissible in criminal proceedings. It is the place of the jury to make judgments and draw inferences from such evidence and thus reach a conclusion.

Expert witnesses, on the other hand, may (where it is deemed necessary) express opinions, draw inferences, and explain the significance of evidence to judges and juries who might not otherwise understand it. The jury still ultimately decides, but the influence of the experts can be immense, as are the dangers posed by fake, incompetent, or biased experts, or experts who give evidence outside their areas of expertise. Such experts can trigger, or help to trigger, a miscarriage of justice, with immeasurable harm both to any wrongly convicted individual and to any genuine victim who does not receive justice. Damage may also be done to the public perception of, and confidence in, the justice system when the innocent are convicted or the guilty go free.

Broadly speaking, the interests of justice demand that expert evidence should be available where needed, be properly explained, be based on sound and impartial

principles, and, thus, be reliable. The same interest of justice may also mean that although expert evidence is available, it may not necessarily be admissible

Miscarriages of justice related to flawed expert evidence have occurred, and both the common law and the recent amendments to criminal procedure rules (CrimPR) and associated practice directions aim to ensure that only credible and helpful expert evidence is placed before the jury.

This chapter will review the landscape around the admissibility and presentation of expert evidence to ascertain if it inhibits the courts, and thus the jury, from assessing such evidence in a rational way, potentially limiting the ability of the courts to deliver rational or just outcomes.

### **1.1 Expert Evidence and Miscarriages of Justice**

Although a guilty verdict generally requires proof of guilt ‘beyond reasonable doubt’<sup>1</sup> (that the jury is ‘sure’ of it), miscarriages of justice can and do occur, and while expert evidence is only adduced in a minority of cases, there have been a number of relatively recent examples of miscarriages of justice where the expert evidence was central to that miscarriage.

A miscarriage of justice may be defined in a number of ways. The simple definition is that a miscarriage of justice occurs where a factually innocent person is wrongly convicted (and perhaps also where a guilty one is wrongly acquitted).

However, the reality, as ever, is more nuanced. As per the Supreme Court in *R (on the application of Adams)(FC) v Secretary of State for Justice*<sup>2</sup> there are four categories in which convictions could be quashed on the basis of fresh evidence. These were:

- (1) Where the fresh evidence shows clearly that the defendant is innocent of the crime of which he has been convicted.

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<sup>1</sup> *Woolmington v DPP* [1935] AC 462, per Lord Sankey 480-482.

<sup>2</sup> *R (on the application of Adams)(FC) v Secretary of State for Justice* [2011] UKSC 18

(2) Where the fresh evidence is such that, had it been available at the time of the trial, no reasonable jury could properly have convicted the defendant.

(3) Where the fresh evidence renders the conviction unsafe in that, had it been available at the time of the trial, a reasonable jury might or might not have convicted the defendant.

(4) Where something has gone seriously wrong in the investigation of the offence or the conduct of the trial, resulting in the conviction of someone who should not have been convicted.<sup>3</sup>

Lord Phillips described these categories as a useful framework for discussion. By a majority, the Supreme Court held that the term 'miscarriage of justice' covered cases within category 1 and 2 only. For this thesis, that is the accepted definition of miscarriage of justice.

Arguably, there is a further category; namely, where a guilty person is wrongly acquitted. This is clearly still a form of miscarriage of justice, and with the amendments to the Criminal Justice Act 2003 Part 10, a person who has previously been acquitted may (in a few exceptional circumstances) be retried. A relatively recent example is that of the 2012 conviction of two individuals for the murder of Stephen Lawrence in 1993. There had been a previous unsuccessful private prosecution bought by Lawrence's parents in 1996.<sup>4</sup>

It is argued that while this permits a clear identification and classification of the type of miscarriage of justice which has occurred, an additional way of viewing the miscarriages of justice may be:

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<sup>3</sup> *ibid* [9]

<sup>4</sup> BBC News 'Stephen Lawrence murder: A timeline of how the story unfolded' 13/04/18 <https://www.bbc.co.uk/news/uk-26465916> accessed 20/04/19

1. That there are miscarriages where the legal system is unable to recognise or manage problems or misrepresentation of the expert evidence, so failures of system
2. That there are miscarriages which result from inaccuracies in the conclusions the expert has drawn from the evidence. This may be seen as an individual or internal issue

As will become apparent throughout the thesis, the demarcation between these two views are often not clear-cut, with the justice system failing to pick up and recognise the individual inaccuracies. This thesis focuses primarily on issues of system and, considering the CrimPR, looks for system solutions to the issues raised.

To give the context to this thesis, it is helpful to consider the effects of two apparent miscarriages of justice. The first I argue is an example of failure within the system to manage and control expert evidence. The second case is one where the misinterpretation of such evidence leads to a miscarriage of justice.

In perhaps one of the most widely known cases, solicitor Sally Clark<sup>5</sup> was convicted of the murder of two of her children. Following referral from the Criminal Cases Review Commission (CCRC), at a second appeal the conviction was quashed primarily because of the failure of the prosecution expert to disclose test results. The Court of Appeal also heavily criticised statistical evidence presented by Professor Roy Meadow, a paediatrician called by the prosecution. The conclusion was that there was no indication of unnatural causes for the deaths, therefore no evidence that a crime had occurred. Sally Clark served three years of a life sentence before being released after the quashing of her conviction. She died four years after being released<sup>6</sup> with family and friends attesting to the fact that the experience of losing her children, the court

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<sup>5</sup> *R v Clark (Sally) (No2)* [2003] Crim1020

<sup>6</sup> *The Guardian* 'Sally Clark, mother wrongly convicted of killing her sons, found dead at home' (17/03/07) <https://www.theguardian.com/society/2007/mar/17/childrenservices.uknews> accessed 29/03/18

case and subsequent imprisonment had resulted in her being unable to resume her life. At her inquest, the coroner determined she had died accidentally of acute alcohol intoxication.<sup>7</sup>

The consequences of this miscarriage of justice also impacted the experts in the case, specifically Professor Meadow and Dr Williams, the Home Office pathologist. Both were referred to their regulatory body, the General Medical Council (GMC), with Meadow being struck off the medical register and Williams being barred from undertaking any Home Office pathology or coroners cases for a period of three years. Meadow appealed the decision and was re-instated onto the register<sup>8</sup> but Williams failed to have his restrictions lifted.<sup>9</sup> At the time, concerns were expressed within medical and legal journals that this was likely to lead to an increasing reluctance of paediatricians to act as expert witnesses in such cases.<sup>10</sup>

In the case of Sally Clark, it is not possible to be sure of her innocence with the miscarriage aligning more closely with categories three and four of *Adams*. I would also argue this miscarriage clearly illustrates system failure. On even cursory examination the system failures which are apparent are:

- A failure of disclosure of pathology results which indicated possible infection and thus potential natural cause of death, at the time of Sally Clarks conviction the common law duty of disclosure applied.<sup>11</sup>
- Although this trial occurred before the introduction of the CrimPR there was still the common law requirement of 'relevant expertise' which will be examined in 3.1.3. Thus the failure within the trial was to detect that Professor Meadow was testifying outside his area of expertise.

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<sup>7</sup> *BBC News* 'Alcohol killed mother Sally Clark' (7/11/07)  
<http://news.bbc.co.uk/1/hi/england/essex/7082411.stm> accessed 29/03/18

<sup>8</sup> *Meadow v GMC* [2006] EWHC 146 (Admin)

<sup>9</sup> *Williams v GMC* [2007] EWHC 2603 (Admin)

<sup>10</sup> C Dyer 'Professor Roy Meadow struck off' (2005) 331 *British Medical Journal* 177; T Magner 'To err is human...?' (2006) 156 *Expert Witness Supplement New Law Journal* 293

<sup>11</sup> *R v Ward* (1993) 96 Cr App R 1

The second case looks very much like a miscarriage as per the first category in *Adams*, and illustrates issues with inaccurate interpretation of evidence at the level of the individual expert. In *R v Dallagher*<sup>12</sup> Mark Dallagher was convicted of murder based on expert testimony regarding an earprint found at the scene of the offence. Experts testified that the print could only have been left by the defendant and that earprint evidence was a unique identifier.<sup>13</sup> At a second trial, Dallagher was exonerated as DNA from the earprint indicated another individual. So unlike Sally Clark's case, where there may never have been any offence, in this case not only did Dallagher spend 6 years in prison for a crime he did not commit, another individual remained free to offend again. At the time of Dallagher's release, police indicated they had no other leads.<sup>14</sup>

A wrongful conviction and imprisonment can have wide-ranging consequences, the campaign group JUSTICE notes that possible consequences include the loss of livelihood, family breakup, and loss of reputation.<sup>15</sup> In the event a conviction is quashed, compensation for the miscarriage is not a forgone conclusion. Under s133(1ZA) of the Criminal Justice Act (CJA) 1988 it is possible to be eligible to receive compensation only if:

...the new or newly discovered fact shows beyond reasonable doubt that the person did not commit the offence...

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<sup>12</sup> *R v Dallagher* [2002] EWCA Crim 1903

<sup>13</sup> C Champod, IW Evett and B Kuchler 'Earmarks as Evidence: A Critical Review' (2001) 46 *Journal of Forensic Science* 1275 highlighted the weakness of the, then current, knowledge with regard to earmark evidence. More recently efforts to semi-automate earprint identification as part of an EU financed study was described and evaluated positively in I Alberink and A Ruifrok 'Performance of the FearID earprint identification system' (2007) 166 *Forensic Science International* 145

<sup>14</sup> S O'Neil 'Expert evidence flaws clear 'earprint killer' *The Telegraph* (23/01/2004) <https://www.telegraph.co.uk/news/uknews/1452346/Expert-evidence-flaws-clear-earprint-killer.html> accessed 30/03/18

<sup>15</sup> JUSTICE 'Supporting Exonerees Ensuring accessible, consistent and continuing support' (2018) para 2

In the recent Supreme Court case *R (on the application of Hallam & Nealon) v Secretary of State for Justice*<sup>16</sup>, limits were set on the compensation for miscarriage of justice, affirming the earlier ruling in *Adams v Secretary of State for Justice*, wherein the court held there were two categories of case which could be said to constitute a compensable miscarriage of justice they were the first two formulations of miscarriage as per *Adams*.

However s133 (1ZA), sets in statute that the first category is the only category of compensable miscarriage. As Blackstock<sup>17</sup> notes, this requires that the individual is able to demonstrate their innocence to be eligible for compensation. It is unclear if Dallagher did receive any compensation for the six years spent in prison, but JUSTICE concluded that under the test applied by 1ZA, it is unlikely Sally Clark would have received compensation as the new evidence did not conclusively show she did not murder her children.<sup>18</sup>

These miscarriages, which were largely caused by errors on the part of expert witnesses, are by no means unique, but illustrate that the issue of misapplied/incorrect expert evidence has consequences that go far beyond that of mere academic conjecture. It is useful to remember that expert evidence almost invariably involves circumstantial rather than direct evidence. The conclusions that may be drawn from direct evidence are either true or false/mistaken, but expert testimony can, as with any other form of circumstantial evidence, lead the court astray in other ways as well. It is possible that the expert has miscalculated, mixed up samples, or failed to disclose evidence.

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<sup>16</sup> *R (on the application of Nealon) v Secretary of State for Justice and R (on the application of Hallam) v Secretary of State for Justice* [2019] UKSC 2

<sup>17</sup> J Blackstock 'Compensating Miscarriages of Justice – what price for wrongful imprisonment?' (2019) 3 *Archbold Review* 6

<sup>18</sup> JUSTICE 'Supporting Exonerees: Ensuring accessible, consistent and continuing support' (2018), 46



## 1.2 Defining terms: Evidence, Truth, and Justice

Evidence can be defined in a number of ways, with Twining describing what he terms the orthodox view. This is that evidence is the means of proving or disproving facts, or of testing the truth of allegations of fact, in situations in which the triers of fact have no first-hand knowledge of the events or situations about which they have to decide what happened.<sup>19</sup> More recently, Dennis simply described evidence as 'information that provides grounds for belief that a particular fact or set of facts is true'.<sup>20</sup>

However, Twining argues that evidence is actually broader than this and is more accurately described as 'information from which further information is derived or inferred... for a variety of purposes'.<sup>21</sup> He notes that traditionally the study of evidence has centred on the rules of evidence, focussing narrowly on questions such as the rationale for the rules, and the slightly wider debate as to reform or codification of the rules. Twining was writing in 1984 and, at the time, he described the current treatments as 'narrow, fragmented, artificially isolated from contiguous fields, unempirical ... and incoherent'<sup>22</sup> suggesting an alternative would need to be 'comprehensive, coherent, realistic, empirical, contextual and sufficiently well integrated that the relations between different lines of enquiry are clearly mapped'.<sup>23</sup> Writing more recently, he noted that the first three concerns have been addressed, but that there is still an open question with regard to coherence.<sup>24</sup>

While it is outwith this thesis to assess the competing models of evidence theory, the fundamental underpinning argument set out by Twining is that the law should be considered in context with other areas of study, such as forensic science and psychology, and that these should be assimilated into the study of law.

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<sup>19</sup> W Twining 'Evidence and Legal Theory' (1984) 47 *The Modern Law Review* 261, 269

<sup>20</sup> I Dennis *The Law of Evidence* (sixth edition Sweet and Maxwell 2017), 1-001

<sup>21</sup> W Twining 'Evidence and Legal Theory' (1984) 47 *The Modern Law Review* 261, 267

<sup>22</sup> *ibid* 267

<sup>23</sup> *ibid* 269

<sup>24</sup> W Twining *Rethinking Evidence Exploratory Essays* (second Edition, Cambridge University Press 2006), 245

This thesis seeks to explore the role of expert evidence in the search for truth. The Oxford English Dictionary defines truth as ‘the quality or state of being true’,<sup>25</sup> with true being defined as being ‘in accordance with fact or reality’.<sup>26</sup>

There is a substantial body of literature questioning the philosophical and jurisprudential nature of truth. Examination of this question is beyond the scope of this thesis, which sits within the rationalist tradition originally espoused by Jeremy Bentham and then widely discussed by Twining.<sup>27</sup> With regard to truth, this approach assumes that the primary aim of fact finding is truth about the facts, and the means to establish that truth is reason. In this approach, truth is conceptualised as being objective truth which corresponds to reality and, as such, the definition of truth largely accords with the dictionary definition.

While the focus of the thesis is the search for truth, it is impossible to exclude the notion of justice from any such consideration. Rawls<sup>28</sup> sets out the idea of justice as fairness, defining a well-ordered society as one that is ‘regulated by a *public* conception of justice’. Rawls explains that such a public conception of justice has three core requirements; firstly, that it is a society in which all citizens mutually accept the same political conception of justice; secondly that the political and social institutions work together to satisfy the principles of justice, and thirdly that citizens have ‘a normally effective sense of justice’ which enables them to understand and apply those publically recognised principles.

This Rawlsian conception of justice seems to accord with the ‘everyday’ definition of justice as defined in the OED:

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<sup>25</sup> Oxford Dictionary <https://en.oxforddictionaries.com/definition/truth> accessed 19/03/19

<sup>26</sup> Oxford Dictionary <https://en.oxforddictionaries.com/definition/true> accessed 19/03/19

<sup>27</sup> W Twining *Rethinking Evidence Exploratory Essays* (second Edition, Cambridge University Press 2006)

<sup>28</sup> J Rawls *Justice as Fairness: A Restatement* The Belknap Press of Harvard University Press London (2001) 3.1

Maintenance of what is just or right by the exercise of authority or power; assignment of deserved reward or punishment; giving of due desserts.<sup>29</sup>

Consequently, for this thesis justice as fairness is the accepted definition.

### **1.3 Thesis: Aims and Narrative**

Although the primary focus of this thesis is the use (or otherwise) of expert testimony in criminal trials, it is important to be aware that expert evidence and guidance is often accessed in the earlier parts of the criminal justice process. In some cases to underpin a technique in widespread use – as with identification parades – or in the support or management of individuals who have already gone through the courts process, such as the use of the polygraph in the management of serious sexual offenders and potentially the perpetrators of domestic abuse. These techniques will be considered in Chapter 6 and 7.

This research has been undertaken using a mixed methods approach consisting of doctrinal, social-legal and comparative approaches, within a case study format. Chapter 2 considers each of these approaches and also potential limitations and restrictions. The way in which these approaches complement one another to address the research question are also outlined.

Chapter 3 provides an overview of the key cases and principles which underpin expert evidence and its use within the courts. The rationale for setting out these principles at the start of the thesis is that these both underpin, and run throughout the thesis.

It was on the back of the miscarriages noted above (among others)<sup>30</sup> that the Law Commission undertook a consultation,<sup>31</sup> and then published a report regarding expert

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<sup>29</sup> *Oxford English Dictionary* (Third Edition Dec 2013)  
<https://www.oed.com/view/Entry/102198>

<sup>30</sup> *R v Ward (Judith)*[1993] 1 WLR 619 CA; *R v Maguire* (1992) 94 Cr App R133 CA; *R v Cannings* [2004] EWCA Crim 1; *R v Harris and others* [2005] EWCA Crim 1980

evidence in criminal proceedings<sup>32</sup> in which it recommended the introduction of a statutory reliability test for such evidence.<sup>33</sup> While the proposed legislation was not taken forward by the Government, many of the suggestions within the report were incorporated into the Criminal Procedure Rules (CrimPR) 2015. Chapter 4 will consider in some detail both consultation and the subsequent recommendations.

A question which needs to be addressed is whether the recommendations contained within *Expert Evidence in Criminal Proceedings in England and Wales* (LC 325), and the subsequent, (arguably unorthodox) implementation of the recommendations regarding the reliability test via the Criminal Procedure Rules Committee (CPRC) provide the English courts, as claimed by Hodgkinson and James, with the 'best guidance in the common-law world,'<sup>34</sup> or whether it represents a missed opportunity.

A number of suggestions were put forward which never made it into the Draft Bill, including the notions of appellate review<sup>35</sup> and court appointed experts<sup>36</sup>, each of which will be considered in some detail.

It will be argued within chapter 4 that a substantial oversight was the decision to leave the *Turner* Principle outside the remit of the review. The *Turner* Principle stipulates that expert opinion is only admissible if the evidence to be considered is 'outside the experience and knowledge of the jury'.<sup>37</sup> In an editorial at the time, the *Criminal Law Review* described the decision as facile.<sup>38</sup> The potential difficulties raised by a strict application of the *Turner* Principle is subject to analysis in relation to eyewitness

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<sup>31</sup> Law Commission, *A New Approach to the Determination of Evidentiary Reliability – a Consultation*. (Consultation paper No 190, 2009)

<sup>32</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011)

<sup>33</sup> *ibid* 1.36

<sup>34</sup> T Hodgkinson and M James *Expert Evidence: Law & Practice* (Fourth Edition Sweet and Maxwell London 2015)

<sup>35</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 5.90

<sup>36</sup> Law Commission, *A New Approach to the Determination of Evidentiary Reliability – a consultation*. (Consultation paper No 190, 2009), 6.65-6.66

<sup>37</sup> *R v Turner* [1975] QB 834

<sup>38</sup> Editorial 'Examining Expert Evidence' (2009) 6 *Criminal Law Review* 387

testimony in Chapter 6. The need for training and education within the judiciary was also noted.

Chapter 5 examines ways in which jurors, and the courts, are enabled to understand expert testimony, and considers alternate ways in which the courts might better understand that evidence to enable them to arrive at a just verdict. These include a consideration of concurrent and consecutive evidence within the criminal courts. Although there is little reported authority of such an approach within the criminal courts in this jurisdiction, the use of concurrent evidence in the civil courts is well established. The admittedly limited use of concurrent evidence in Australian criminal trials is examined, with the relevance that Australia is also a common law jurisdiction, where the divergence from the English common law is relatively recent.<sup>39</sup> The use of consecutive evidence in this jurisdiction is largely absent from the reported case law, but is often a reality, focussing more on expert availability than consideration of alternate ways to manage expert evidence.

Another approach to expert testimony in a number of Australian states is that of criminal trial by judge alone. The notion of the judge alone trial is considered because of the oft expressed concerns that jurors can struggle to fully understand elements of expert testimony.<sup>40</sup>

Within this jurisdiction consideration will be given to the controversy that surrounded s42 and s43 of the Criminal Justice Act 2003 which, when enacted, provided for judge alone trials in the case of either jury tampering or for complex fraud cases. The latter of these can be seen to be heavily dependent on expert testimony<sup>41</sup> and as such the question that arises is whether the reluctance on the part of the legislature and elements of the judiciary to consider such an option is the result of rational consideration or whether the jury trial is such a sacred cow that no rational

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<sup>39</sup> Australia became independent from Britain in 1901 <https://www.australia.gov.au/about-government/how-government-works/federation> accessed 20/03/19

<sup>40</sup> Law Commission, *A New Approach to the Determination of Evidentiary reliability – a consultation*. (Consultation paper No 190, 2009), 2.8

<sup>41</sup> e.g. *R v Pabon* [2018] EWCA Crim 420

consideration can be undertaken. Would a judge alone be better able to understand and analyse complex expert evidence, or would such a consideration be a case of releasing experts from their obligation to make complex evidence intelligible to 'the man in the street' if specific provision were made? Has such a change fundamentally undermined the jury system where it is in use?

Given the range of topics which are potentially subject to expert testimony, the selected case study approach permits focus on a limited range of areas. These are eye- and earwitness testimony which are subject to analysis in Chapter 6 and the use of the polygraph which is examined in chapter 7.

Chapter 6 examines the use of both eye and earwitness identification evidence, analysing both the science and the case law relating to such evidence. The wide disparity between the psychological research which notes the difference between the 'commonsense' and 'scientific' understanding of the effectiveness of such evidence is explored. The notion is developed that the use of expert evidence in relation to both eye and earwitness identification requires a more consistent and nuanced approach with recommendations being made as to review of the *Turner* principle, but also in respect of the *Turnbull* guidelines.

In chapter 7 the potential use of expert testimony relating to the polygraph takes as its starting point the oft-asserted determination from *Jerome v Fennell Property maintenance Ltd*<sup>42</sup> that

Evidence produced by the administration of a mechanically or chemically or hypnotically induced test on a witness so as to show the veracity or otherwise of that witness is not admissible in English law.

The argument is made that while this may still be the case with two of those elements a cogent case can be made that polygraph evidence, which is already seeing increasing

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<sup>42</sup> *Fennell v Jerome Property Maintenance Ltd*, The Times (26 November 1986) QBD. 

use in certain areas of the criminal justice system<sup>43</sup>, could be a suitable subject for expert testimony and could in limited circumstances aid the court and the jury in reaching a just outcome.

Chapter 8 closes the thesis by making recommendations for further research and potential reform on the basis of the analysis set out within the thesis.

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<sup>43</sup> see chapter 7 at 7.2

## Chapter 2

### 2.0 Methodology

This is a library based study utilising a mixed methodology consisting of doctrinal analysis, socio-legal, and comparative research all within a case study approach.

The rationale for the selected approach is that, given the substantial range of potential subjects for expert testimony, it would not be possible to carry out any meaningful analysis unless a tightly defined range of areas/subjects was clearly identified.

Whilst doctrinal analysis forms the predominate thread, both socio-legal and comparative research are core to this analysis. This chapter provides a brief review of each approach, identifying its relevance in addressing the set question.

### 2.1 Doctrinal Analysis

Doctrinal research or 'black letter' law considers the law as a self contained system, and black letter research 'aims to systematise, rectify and clarify the law on any particular topic by a distinctive mode of analysis of authoritative texts that consist of primary and secondary sources'<sup>44</sup> with the assumption that 'the character of legal scholarship is derived from law itself'.<sup>45</sup> Central to this model is that it is free from 'political or personal contamination.'<sup>46</sup>

The relevance of this methodology is that as this thesis considers how the law may accommodate developments in expert evidence, the starting point must logically be to fully understand the ratio for the relevant case law, as only then can such case law be meaningfully subject to analysis.

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<sup>44</sup> M McConville and WH Chui *Research Methods for Law* (Eds) (Edinburgh University Press 2017), 4

<sup>45</sup> E L Rubin (1997) *Law and the Methodology of Law* (1997) *Wisconsin Law Review* 521

<sup>46</sup> EH Tiller and FB Cross *What is Legal Doctrine?* (2005) *Northwestern Public Law Research Paper No 05-06* 517, 518



## 2.2 Socio-legal Studies

While doctrinal analysis will form a central thread in the thesis, it is arguable that information relating to the reception of expert evidence/possible bias in expert evidence is largely context dependent and, thus, socio-legal in nature. The fundamental research underpinning the expert evidence, which is then applied in a legal context is it is also argued strongly interdisciplinary in nature. As becomes apparent throughout the thesis science both informs and drives the evidence coming before the courts,<sup>47</sup> and as will be demonstrated, the same may be said of some evidence which it will be argued should come before the courts.

There are a wide range of theories concerning the relationship of law and society, and while an in-depth analysis of these theories is outwith this work, a brief examination is deemed useful. One approach is the 'mirror thesis' currently accepted by the majority of western legal theories and which is clearly set forth by Vago:

Every legal system stands in close relationship to the ideas, aims and purposes of society. Law reflects the intellectual, social, and economic and the political climate of its time.... But law is not only conditioned by social forces; it also plays a crucial role in shaping the social environment.<sup>48</sup>

It is also worth noting Cotterrell's comment on the place of socio-legal studies:

All the centuries of purely doctrinal writing on law have produced less valuable knowledge about what law is, as a social phenomenon, and what it does than the relatively few decades of work in sophisticated modern empirical socio-legal studies.<sup>49</sup>

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<sup>47</sup> e.g see 4.2, 5.2.1, 6.1.1, 6.1.3, 6.5, 7.4.1

<sup>48</sup> S Vago, *Law and Society* (Englewood Cliffs 1981), 3

<sup>49</sup> R Cotterrell, *Law's Community: Legal Theory in Sociological Perspective* (Oxford University Press 1995), 296

While it may be arguable that such a sweeping statement could be seen as overstating the case for the non-doctrinal approach, it is fair to say that the merits and relevance of utilising other disciplines are now widely recognised.<sup>50</sup> The possible merits of well-performed socio-legal research was acknowledged by (the then) Hale LJ speaking extra-judicially, who noted a number of socio-legal studies which had been cited in court.<sup>51</sup>

### 2.3 Comparative Law

The third methodological strand is that of comparative law. In this approach, law from jurisdictions other than the researcher's own is studied to review how issues are addressed and often to ascertain if the solutions from these other jurisdictions could inform law reform in the researcher's home jurisdiction. The Law Commission uses this approach widely within its programme of law reform<sup>52</sup> and within the thesis the approach is utilised in relation to both identification evidence in chapter 6 and the polygraph in chapter 7.

Reimann notes that the methods within comparative law:

... essentially consists of the juxtaposition of blackletter rules or doctrines from a functional perspective, or at best, of potential case solutions.<sup>53</sup>

The functional method is a mainstream approach to comparative law. The selected method, within this thesis, from within the comparative law canon is that of functional equivalence, or functionalist comparative law. It is important to be aware that whilst this approach may be viewed as mainstream it is not without its critics with one view

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<sup>50</sup> M McConville and WH Chui, *Research Methods for Law* (Edinburgh University Press 2017), 6

<sup>51</sup> B Hale, 'Should judges be socio-legal scholars?' *Socio-Legal Studies Association 2013 Conference*, 26 March 2013 [www.supremecourt.uk/docs/speech-130326.pdf](http://www.supremecourt.uk/docs/speech-130326.pdf) accessed 4/01/15

<sup>52</sup> Law Commission Examples of reviews including comparative research *Murder, Manslaughter and Infanticide* (LC report 304, 2006); Law Commission, *A New Approach to the Determination of Evidentiary reliability – a consultation*. (Consultation paper No 190, 2009) ; *Insanity and Automatism - Supplementary Material to the Scoping Paper* July 2012.

<sup>53</sup> M Reimann, 'The Progress and Failure of Comparative Law in the Second Half of the Twentieth Century' (2002) 50 *American Journal of Comparative Law* 671, 693

being that this approach avoids serious consideration of methodology. Brand<sup>54</sup> arguing that 'the methodological malaise of comparative law seems to be incoherence rather than lack of effort'<sup>55</sup>, going on to present a detailed critique of the approach and suggest alternatives.

Within this thesis, the notion of functional equivalence is particularly noted with regard to jury research, for example, why a jury made the decision they did, thus juror reasoning. As will be noted in Chapter 5, such research is severely restricted in England and Wales under section 8(1) of the Contempt of Court Act 1981.<sup>56</sup> Material from both the United States (US) and Australia has been accessed, as such a rigid bar does not exist within those jurisdictions, and while caution is always required when applying the findings from one country to the systems of another, it is argued that functional equivalence can be applied.

## **2.4 Case Study**

The approach within which this mixed methodology was applied is that of a case study. There is academic debate as to whether case study research is a methodology in its own right, a choice of what is to be studied,<sup>57</sup> or a comprehensive research strategy.<sup>58</sup> It is argued that the finer definitional points of the term 'case study' are outwith this thesis as the model remains the same.

Creswell defines case study research as:

...a qualitative approach in which the investigator explores a real-life, contemporary bounded system (a case) or multiple bounded systems

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<sup>54</sup> O Brand, 'Conceptual Comparisons: Towards a Coherent Methodology of Comparative Legal Studies' (2007) 32 *Brooklyn Journal of International Law* 2, 405

<sup>55</sup> *ibid* 408

<sup>56</sup> ...it is a contempt of court to obtain, disclose or solicit any particulars of statements made, opinions expressed, arguments advanced or votes cast by members of a jury in the course of their deliberations in any legal proceedings.

<sup>57</sup> RE Stake 'Qualitative Case Studies' in NK Denzin and YS Lincoln (Eds) *The Sage Handbook of Qualitative Research* (third edition Thousand Oaks, CA Sage 2005), 443

<sup>58</sup> RK Yin *Case Study Research: Design and Methods* (Fifth Edition Sage London 2014), 17

(cases) over time, through detailed, in depth data collection involving multiple sources of information..., and reports a case description and case themes.<sup>59</sup>

For the purpose of this thesis, this approach allows the researcher to define the area of expert evidence under consideration, to draw data from both the scientific and legal literature relating to each of those defined areas and draw conclusions as to suggestions for reform.

Arguably, although each of the methodological approaches identified has its own very distinct characteristics, for the purpose of this thesis the case study approach effectively acts as the 'wrapper' within which each of the other approaches allows data sources to be collated and analysed.

One of the key strengths of properly conducted case study analysis is that it presents an in-depth understanding of the case.<sup>60</sup> In terms of this thesis, this translates into an understanding of both the law pertaining to the subject and the science underpinning the area under consideration.

Cresswell identifies one of the key challenges with this approach being that of both identifying the scope of the case to be studied and the range of information to be analysed.<sup>61</sup> Yin notes that poorly planned case study research can take excessive time to complete and may result in unreadable documents.<sup>62</sup> In the case of this thesis, it is argued that the limits and data sources are readily identified by the other elements of the methodological approach already identified.

The case studies selected for this thesis, as previously noted are identification evidence and the polygraph. The rationale for selecting these two topics were that in

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<sup>59</sup> JW Cresswell *Qualitative Inquiry & Research Design* (Third Edition Sage London 2013), 97

<sup>60</sup> *ibid* 98

<sup>61</sup> *ibid* 101

<sup>62</sup> RK Yin *Case Study Research: Design and Methods* (Fifth Edition Sage London 2014), 21

the case of identification evidence there is a clear history of miscarriages of justice relating to this area and it was felt that the underpinning science would enable the development of a case study highlighting potential issues with the *Turner* principle.

The decision to make the polygraph the second case study followed discussion with my supervisor regarding issues of establishing if a witness is truthful. Although inadmissible and controversial the polygraph appeared fertile ground for closer analysis with only limited primary legal comment from this jurisdiction being available.

## **2.5 Rationale for the Selected Approach**

It is perhaps useful to indicate how this approach works by outlining the example of the methods being applied in relation to eyewitness identification evidence in chapter 6. The analysis in chapter 6 is far more detailed, this is simply to indicate how the methods complement and strengthen the overall argument.

The doctrinal element is the close analysis of *Gage v HM Advocate*.<sup>63</sup> *Gage* rejects the notion that expert evidence has a role to play in determining the limits of the ability of the witness to provide accurate identification. The socio-legal element then gives the context by exploring the psychological evidence about the effectiveness and understanding of eyewitness testimony, which clearly indicates that there are elements of eyewitness identification where the everyday understanding and the science are widely at variance. The comparative element takes an analysis undertaken in the US in *State v Henderson*<sup>64</sup> that resulted in revised jury instructions, which better reflected the current science. These were consequently adopted within that jurisdiction.<sup>65</sup> It will be argued that this is an equivalent issue, in that both in this jurisdiction and the US there is wide judicial and non-judicial recognition that eyewitness testimony has been implicated in numerous miscarriages of justice/wrongful convictions.<sup>66</sup>

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<sup>63</sup> *Gage v HM Advocate* [2011] HCAJC 40

<sup>64</sup> *State v Henderson* 27 A3d 872 (NJ 2011)

<sup>65</sup> see 6.4

<sup>66</sup> see 6.1.1

Within chapter 6 I argue that the principles within the model jury instructions formulated in response to the analysis in *Henderson* should form a basis for a revised and more nuanced *Turnbull* direction in this jurisdiction.

## 2.6 Potential Concerns and Limitations

This thesis requires that the researcher has a sound grasp of both legal and non-legal information, the non-legal element being predominately health sciences/psychology-related. Roberts<sup>67</sup> highlights the difficulties that can present when a scholar or researcher has to operate across two or more disciplinary boundaries, noting that there will often be greater proficiency with one area than the other.

For this thesis, the concern is addressed by the both the background of the researcher and the approach taken to such evidence. The researcher has a strong health sciences background being educated to Masters level in the area and also working as a senior registered nurse within the healthcare sector.

As the health and life sciences/psychology component underpins, but does not drive, the research, the selected approach has been that, as far as possible, the research related to these areas has been sourced using existing published meta-analyses from peer-reviewed publications. This somewhat limits the requirement for this researcher to undertake high level analysis of primary data which is outwith, but nonetheless informs, this study. It is argued that such an approach means this thesis can focus on how the scientific evidence works with the law, thus being a law thesis rather than attempting to undertake primary analysis of subject matter that is outside the expertise of the author. The integration of such 'non-legal' topics is well recognised in the legal literature if one considers the examples of peer-reviewed journals addressing such areas of study.<sup>68</sup>

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<sup>67</sup> P Roberts *Interdisciplinarity in Legal Research* in *Research Methods for Law* edited by M McConville and WH Chui (Edinburgh University Press 2017), 97

<sup>68</sup> e.g. *Journal of Law and Biosciences* is an open access peer-reviewed journal focusing on the advances at the intersection between law and neuroscience, publisher OUP; *Behavioral Sciences and the Law* is a quarterly peer-reviewed journal, publisher John Wiley and Sons

With regard to the comparative law element, some authors express concern that comparative methodology has not yet matured into a well-defined and coherent discipline.<sup>69</sup> At a more practical level, perhaps the most obvious limitation is the availability of translated material when the researcher is not fluent in any language other than English. It is also important to note that the limitations of language are not just those of conversation, but the ability to master foreign legal linguistics, both written and spoken.<sup>70</sup>

A less obvious, but possibly more critical concern, is that of the need to have a more than superficial understanding of the social, legal, and cultural context in which the relevant laws were made and operate.<sup>71</sup> Husa notes the concern that if one is considering European civil law then English may not even have the proper terminology to fully capture the meaning of some concepts.<sup>72</sup> Whilst that is not an issue in this thesis as there is little consideration of such law, the point is well made regarding the level of understanding and appreciation of the language and culture of the other jurisdictions that is required for effective analysis.

It is argued that this particular concern will at least be partially compensated for, as the selected jurisdictions are common law jurisdictions where much of the law has its roots in the English common law. Additionally, exposure to material both legal and non-legal from other jurisdictions is now far less problematic than pre-internet, thus increasing access to material, which whilst by no means fully bridging the divide will allow greater cultural context to material from such areas.

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<sup>69</sup> M Reimann, 'The Progress and Failure of Comparative Law in the Second Half of the Twentieth Century' (2002) 50 *American Journal of Comparative Law* 671, 685

<sup>70</sup> J Husa, 'Comparative Law, Language and Doctrine' in *Methodologies of Legal Research: Which Kind of Method for What Kind of Discipline?* Edited by M Van Hoecke (Hart Publishing Oxford 2011)

<sup>71</sup> J Bell, 'Legal Research and the Distinctiveness of Comparative Law' in *Methodologies of Legal Research Which Kind of Method for What Kind of Discipline?* Edited by M Van Hoecke (Hart Publishing Oxford 2011)

<sup>72</sup> J Husa, 'Comparative Law, Language and Doctrine' in *Methodologies of Legal Research: Which Kind of Method for What Kind of Discipline?* Edited by M Van Hoecke (Hart Publishing Oxford 2011), 220

The primary jurisdictions considered within this strand are the USA, Canada and Australia. The rationale for selecting these jurisdictions include elements of practicality (English as main language) and also that ongoing research indicated substantial amounts of case law/ academic commentary relevant to the areas under consideration within the thesis. It is also noted that these jurisdictions have been moving away from the English common law long enough to have developed initiatives/ approaches offering new perspectives.

The situation remains more problematic with material from civil law jurisdictions where English is typically not the primary language and the availability of translated material – both legal and non-legal – is more restricted and, as such, only minimal use has been made of material from non-English speaking/non-common law jurisdictions.

Having noted the relative proficiency of the researcher with regard to the relevant areas of science and psychology, it should be noted that this study, among other elements, reviews the then current science relating to the potential areas of expert evidence within the case studies, focussing where possible on meta-analysis. Scientific research in some areas is rapidly moving and advancing; as such, although the researcher has a solid foundation in the health and life sciences, this does not equate to being equipped to undertake primary analysis of specialist emerging scientific data. It is possible that emerging cutting edge primary research exists that may alter the existing scientific paradigm, but which will not be addressed within this thesis.

It should also be noted that the researcher neither has a qualifying law degree nor works within the criminal justice system, and understanding of, and exposure to, the realities and practicalities of the criminal justice system and evidence presentation is limited.



## Chapter 3

### 3.0 Expert Evidence: Principles and Key Cases

Expert opinion evidence is admissible in both civil and criminal cases, with procedural rules<sup>73</sup> applicable to both. In civil cases, Part 35 of the Civil Procedure Rules (CPR) controls the use of expert testimony; in criminal cases, the comparable rules are set out under rule 19 of the Criminal Procedure Rules (CrimPR). While there are areas such as the overriding duty of the expert being to the court<sup>74</sup> that are common to both sets of procedures, there are also fundamental differences in the form and emphasis of the two sets of rules. It is argued that the differences in those rules reflect the impact of the two systems on both the individual and the wider system.

Although this is something of a generalisation, in a civil case the decision typically relates to a loss that has occurred, and the decision to be made is where that loss, and thus liability, should fall. The standard of proof is the 'balance of probabilities', and the losses for the losing party can be considerable.

While the financial and reputational losses from a civil case can be considerable, this has to be set against the outcomes in a criminal case. Being found guilty of a criminal offence results not just in financial or reputational damage, but potentially the loss of liberty, sometimes for many years and a criminal record that may potentially impact for the rest of the individual's life. The greater penalties inherent in the criminal justice system mean that the drive to avoid convicting the innocent is regarded as the priority. This is summed up in the adage 'it is better that 10 guilty persons escape than one

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<sup>73</sup> Civil Procedure Rules were first introduced in 1998 following Lord Woolf's report *Access to Justice* (1996) and had the aim of ensuring the cases were managed in a way which was just, fair, and responsive and also controlled the costs of litigation – for detail see *Access to Justice Report* 1996 section 1 overview para 1. The Criminal Procedure Rules were not introduced until 2005 following Lord Justice Auld's *Review of the Criminal Courts of England and Wales* and the first version of the CrimPR were described as 'a modest but at the same time significant step towards the creation of a comprehensive criminal procedure code.'

<https://www.justice.gov.uk/courts/procedure-rules/criminal/notes>

<sup>74</sup> CPR 35.3 (1) It is the duty of experts to help the court on matters within their expertise. (2) This duty overrides any obligation to the person from whom experts have received instructions or by whom they are paid; CrimPR 19.2.—(1) An expert must help the court to achieve the overriding objective — (2) This duty overrides any obligation to the person from whom the expert receives instructions or by whom the expert is paid.

innocent suffer punishment'.<sup>75</sup> The standard of proof required is, therefore, the higher criminal standard of 'beyond reasonable doubt'.

It is important to note that 'beyond reasonable doubt' generally applies to the case as a whole, not to the individual components of both expert and non-expert testimony.<sup>76</sup> In the event that a particular component is individually critical to the outcome of the case, the judge would then so direct the jury.

The focus of this thesis is on expert evidence in criminal cases, but there is inevitably some overlap where relevant research or case law reflects the civil system.

Before moving into the body of the thesis, it is important to understand the basic principles underpinning the admissibility of expert evidence, and to be aware of certain key cases that will be frequently referenced.

Expert evidence is admissible at common law, but subject to the CrimPR 2015 r19 and the associated practice directions.<sup>77</sup>

### **3.1 Admissibility of Expert Evidence: *Bonython***

The test for the admissibility of expert evidence was set out by King CJ in the South Australian case *R v Bonython*.<sup>78</sup> As a case from a Commonwealth jurisdiction, this might not ordinarily have been considered authoritative with regard to the English and Welsh courts, but has been frequently cited with approval as the leading case with

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<sup>75</sup> Blackstone *Commentaries on the Laws of England* (1765–1769), vol 4, 27 cited by the New Zealand Supreme Court in *R v Hansen* [2008] 1 LRC 26 [132]

<sup>76</sup> B Robertson and GA Vignaux *Interpreting Evidence Evaluation Forensic Science in the Courtroom* (John Wiley and Sons 1995), 79

<sup>77</sup> It should be noted that the CrimPR were revised and renumbered in 2015, so for cases pre-2015 expert evidence was covered by r33.

<sup>78</sup> *R v Bonython* (1984) 38 SASR 45

regard to the admissibility of expert opinion,<sup>79</sup> notably by the Supreme Court in *Kennedy v Cordia (Services) LLP*.<sup>80</sup>

Setting out the three limbs of the test, King CJ stated:

The first is whether the subject matter of the opinion falls within the class of subjects upon which expert testimony is permissible. This may be divided into two parts (a) whether the subject of the opinion is such that a person without instruction or experience in the area of knowledge or human experience would be able to form a sound judgment on the matter without the assistance of witnesses possessing special knowledge or experience in the area, and (b) whether the subject matter of the opinion forms part of a body of knowledge or experience which is sufficiently organised or recognised to be accepted as a reliable body of knowledge or experience, a special acquaintance with which by the witness would render his opinion of assistance to the court. The second question is whether the witness has acquired by study or experience sufficient knowledge of the subject to render his opinion of value in resolving the issues before the court.<sup>81</sup>

### **3.1.1 Assistance (The *Turner Principle*)**

The first limb is that of assistance. The duty of the expert witness was set out in the Scottish case *Davie v Edinburgh Corp* as being to:

...furnish the judge or jury with the necessary scientific criteria for testing the accuracy of their conclusions, so as to enable the judge or jury to form

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<sup>79</sup> *R. v Ahmed (Rangzieb)* [2011] Crim LR 734; *R v Crowdy* [2009] EWCA Crim 1219; *R v Hodges* [2003] EWCA Crim 290

<sup>80</sup> *Kennedy v Cordia (Services) LLP* [2016] UKSC 6 [43]; the most recent citation with approval in the criminal courts is *R v Hosie (Lee)* [2017] NICA 9. Review of Westlaw database shows 24 citations with approval in criminal cases, with the first being *R v Meads* [1996] Crim LR 519, this appears to be the earliest reported use of King CJ criteria by the English courts – this was the situation on 2 December 2017.

<sup>81</sup> *R v Bonython* (1984) 38 SASR 45 [46]

their own independent judgment by the application of these criteria to the facts proved in evidence.<sup>82</sup>

The question of what subjects are suitable areas for expert evidence has been clarified on a number of occasions over the years. Steyn LJ in *R v Clarke* notably said:

There are no closed categories where such evidence may be placed before a jury. It would be entirely wrong to deny to the law of evidence the advantages to be gained from new techniques and new advances in science.<sup>83</sup>

This suggests that, providing the rules governing its admissibility are met, there are no areas of expert evidence that must automatically be deemed to be 'off limits'. As will be explored within this thesis, however, the actual situation is less clear-cut than this statement may make it appear.

The fact that an expert has an opinion on a subject does not automatically make that subject or opinion admissible in court. The question is whether the evidence would be of *assistance* to the court. One of the core cases with regard to this principle is *R v Turner*, from which the *Turner* Principle emerged. An understanding of this principle is central to any consideration of expert evidence and warrants closer examination.

Mark Turner was convicted of murdering his girlfriend by repeatedly striking her with a hammer while they were sitting in a car. The defence argued provocation as his girlfriend had just told him that she had become pregnant by another man while he was in prison. Turner claimed he never meant to kill her with the hammer that was kept in the car.

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<sup>82</sup> *Davie v Edinburgh Corp* [1953] SC 34 [40] – this case has been cited in a number of English decisions e.g. *R v Lutterall* [2004] EWCA Crim 1344 [36]; *R v Gilfoyle* [2001] 2 Cr App R 5 at 67; *Re B (A minor)* [1995] 9 WLUK 184 and is also cited in Hodgkinson and James at 1-006 regarding the value of expert witness evidence

<sup>83</sup> *R v Clarke* (1995) 2 Cr App R425 at 430

The defence had sought to introduce a psychiatric report which, while concluding that Turner did not suffer from any mental illness, made the following observation:

His homicidal behaviour would appear to be understandable in terms of his relationship with [the victim]... such as to make him particularly vulnerable to be overwhelmed by anger if she confirmed the accusation that had been made about her. If his statements are true that he was taken completely by surprise by her confession he would have appeared to have killed her in an explosive release of blind rage. His personality structure is consistent with someone who could behave in this way.<sup>84</sup>

The defence argued that the psychiatrist's opinion was relevant as it helped to establish how Turner could be easily provoked and, therefore, lent credibility to his explanation of events. Ruling Lawton LJ noted the evidence was relevant, but that the points raised were within ordinary human experience and, as such, inadmissible. The judgment contained the oft cited passage which underpins the *Turner* Principle:

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..., 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.<sup>85</sup>

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<sup>84</sup> *R v Turner* [1975] QB 834 at 840

<sup>85</sup> *ibid* 841

Although well established and frequently cited, this principle is not without its critics, with concern being raised among other areas that it is not always clear what is, and is not, within the experience and knowledge of the court (this will be considered in more detail at 6.1.1); however the Law Commission did not recommend changes to this element of the common law test, arguing it was fundamentally sound.<sup>86</sup> This notion of assistance and the *Turner* Principle will be revisited throughout the thesis as proposals for change in admissibility are subject to the test. The more fundamental question of the suitability of the *Turner* Principle will also be considered.

The first limb within *Bonython* is, in effect, a restatement of the *Turner* Principle; it should, however, be noted that even where expert evidence meets the requirement of being relevant and outside the experience of the jury, it may still be excluded if in the opinion of the court its prejudicial effect outweighs its probative value.<sup>87</sup>

### 3.1.2 Reliability

The issue of evidentiary reliability forms the second limb of *Bonython* and is also the primary focus of the Law Commission consultation (CP190) and subsequent recommendations.<sup>88</sup> It will be considered in some detail in Chapter 4.

The accepted position in this jurisdiction was that there was no enhanced test of admissibility for expert evidence, following the position in both *R v Dallagher*<sup>89</sup> and *R v Luttrell*<sup>90</sup> and subsequently affirmed by the Court of Appeal in *R v Reed*.<sup>91</sup>

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<sup>86</sup> Law Commission, *A New Approach to the Determination of Evidentiary reliability – a consultation*. (Consultation paper No 190, 2009), 1.8

<sup>87</sup> T Hodgkinson and M James *Expert Evidence: Law & Practice* (Fourth Edition Sweet and Maxwell London 2015), 1-014

<sup>88</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011)

<sup>89</sup> *R v Dallagher* [2003] 1 Cr App R 12 at 207

<sup>90</sup> *R v Luttrell* [2004] EWCA Crim 1344 [37].

<sup>91</sup> *R v Reed* [2009] EWCA Crim 2698 [111] quoting passage from Cross and Tapper: *The Law of Evidence*, 11<sup>th</sup> Edition, 580-581.

The notion that there should be no enhanced test in such cases warrants further examination. The standard position is succinctly stated by *Blackstones Criminal Practice*:

The cardinal rule of the law of evidence is that, subject to the exclusionary rules, all evidence which is sufficiently relevant to the facts in issue is admissible, and all evidence which is irrelevant or insufficiently relevant to the facts in issue should be excluded.<sup>92</sup>

The factor of relevance was set out in *DPP v Kilbourne* before the House of Lords wherein Lord Simon of Glaisdale stated that:

Evidence is relevant if it is logically probative or disprobative of some matter which requires proof.<sup>93</sup>

Thus, as with other forms of evidence, expert testimony was only admissible if deemed relevant.<sup>94</sup>

Within *Bonython* this limb notes the 'recognised body of opinion' which it may be argued is aligned to the notion of general acceptance set out in the US case *Frye*<sup>95</sup> which will be considered shortly. Considering this particular point, the Law Commission determined that if this aspect of the *Bonython* test was indeed part of English law, then the question would be whether the 'body of knowledge or experience is accepted as reliable by the courts rather than by a relevant community

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<sup>92</sup> Blackstones Criminal Practice 2019, F1.11

<sup>93</sup> *DPP v Kilbourne* [1973] AC 729 at 756

<sup>94</sup> The English courts did appear to move, briefly, from the position of 'no enhanced test' in *R v Gilfoyle* [2001] 2 Cr App R 5, wherein the Court declined to admit expert testimony regarding psychological autopsy, part of the rationale for the rejection of such evidence was that ...the present academic status of psychological autopsies is not, in our judgment, such as to permit them to be admitted as a basis for expert opinion before a jury.[25]

<sup>95</sup> *Frye v United States* 293 Fed 1013 (1923) – Court rejected the scientific validity of the early polygraph because the technology at the time was insufficiently established to have gained general acceptance in the relevant field.

of experts',<sup>96</sup> as such, this is substantially different to the view of the courts in the US states which still operate this standard, rather than the newer *Daubert* standard which will also be considered shortly.

However, although the Court of Appeal in *R v Reed* affirmed there was no enhanced test of admissibility, they also said:

...expert evidence of a scientific nature is not admissible where the scientific basis on which it is advanced is insufficiently reliable for it to be put before the jury. ... If the reliability of the scientific basis for the evidence is challenged, the court will consider whether there is a sufficiently reliable scientific basis for that evidence to be admitted,..., then it will leave the opposing views to be tested in the trial.<sup>97</sup>

It seems difficult to argue that this does not represent an enhanced test of admissibility for expert testimony. The Law Commission in LC325 noted the presence of this common law test.<sup>98</sup>

The critical nature of evidential reliability, and its application to developing areas of expert evidence, will be subject to further analysis throughout this thesis.

### **3.1.3 Relevant Expertise**

The third limb of the test relates to *relevant expertise*. There is no statutory definition of what constitutes an 'expert' in English law. The Crown Prosecution Service states that:

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<sup>96</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 2.13

<sup>97</sup> *R v Reed* [2009] EWCA Crim 2698 [111]

<sup>98</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 2.14



An expert witness is a witness who provides to the court a statement of opinion on any admissible matter calling for expertise by the witness and is qualified to give such an opinion.<sup>99</sup>

This is somewhat circular, and essentially reflects the judgment in the leading case *R v Silverlock* that in order to give evidence as an expert 'the witness....must be expert; he must be skilled'.<sup>100</sup> While acknowledging this apparent circularity, Redmayne argues that the range of subjects which may be covered, and the different routes to gaining this knowledge, make this largely pragmatic approach appropriate.<sup>101</sup> *Silverlock* does not require that knowledge be gained via formal training, or that the expert is a professional in the relevant field. In a majority of areas relating to science, medicine, psychiatry, accountancy and such, any expert witnesses must, in practice, have gone through formal courses of study and training, but in others this may not always be the case. In *R v Hodges*,<sup>102</sup> for example, a police officer gave expert evidence as to the price and supply of heroin: knowledge gained by experience rather than via academic study.

Once the court is satisfied that the individual in question can give expert evidence, it will be for the court and the jury to determine the weight of that evidence.

### 3.1.4 Impartiality

The fourth point that of *impartiality* is addressed by rule 19.2 of the CrimPR (2015) noting the requirement to give opinion evidence, which is both objective and unbiased. The overriding duty to the court, coupled with the requirement to produce objective and unbiased opinion also exists in earlier iterations of the CrimPR.<sup>103</sup>

The elements of relevant expertise and impartiality will be considered in Chapter 3.

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<sup>99</sup> Crown Prosecution Service (2015) 'Expert Evidence First edition – 2014 revised February 2015', 5

[https://www.cps.gov.uk/sites/default/files/documents/legal\\_guidance/expert\\_evidence\\_first\\_edition\\_2014.pdf](https://www.cps.gov.uk/sites/default/files/documents/legal_guidance/expert_evidence_first_edition_2014.pdf) accessed 23/12/17

<sup>100</sup> *R v Silverlock* [1894] 2 QB 766

<sup>101</sup> M Redmayne *Expert Evidence and Criminal Justice* (Oxford University Press 2001) 95

<sup>102</sup> *R v Hodges* [2003] EWCA Crim 290

<sup>103</sup> Rule 33.2 of the CrimPR 2010

It should be noted that a jury is not bound by the opinion of an expert as was made clear by the Court of Appeal in *R v Ugoh*.<sup>104</sup>

### **3.2 *Frye* and *Daubert***

Two key cases with regard to expert evidence, which need to be part of any consideration, is the previously noted US case *Frye* and the later case *Daubert*.

Prior to the United States Supreme Court decision in *Daubert v Merrell Dow Pharmaceuticals Inc.*,<sup>105</sup> the applicable standard for admissibility of expert opinion in the US was the 'general acceptance standard' as set out in *Frye v United States*. This standard requires simply that the proffered expert opinion be sufficiently established to have been accepted within the field to which it belongs, with the court stating:

Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognised, and while the courts will go a long way in admitting experimental testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.<sup>106</sup>

However, this was deemed to run contrary to Rule 702 of the Federal Rules of Evidence, which serves as the model for most States Rules of Evidence and states:

If scientific, technical, or other specialised knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a

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<sup>104</sup> *R v Ugoh* [2001] EWCA Crim 1381 [23]

<sup>105</sup> *Daubert v Merrell Dow Pharmaceuticals Inc* 509 US 579 (1993)

<sup>106</sup> *Frye v United States* 293 Fed 1013 (1923)

witness qualified as expert by knowledge, skill, experience, training or education, may testify thereto in the form of opinion or otherwise.<sup>107</sup>

It is clear that this rule makes no stipulation that such evidence must first reach a standard of general acceptance such that it is the prevailing or dominant theory within the scientific community. It is also necessary to remain aware that even if a theory did reach a level where it was the predominant, or even the only, theory relating to an area of scientific enquiry, such a standard of acceptance would still be no absolute guarantee of accuracy, or that the theory or opinion is correct.<sup>108</sup>

The decision in *Daubert* related to a claim that an antiemetic medication had caused birth defects. There was no published evidence to this effect. The expert tendering evidence on behalf of the defendant organisation had reviewed all the published literature on the medication and birth defects; this amounted to more than 30 studies and 130,000 patients, and none of these studies found the medication to present a risk of causing birth defects.

The plaintiffs did not contest the findings in relation to published studies, but instead put forward expert evidence relating to both laboratory and animal studies, along with reanalysis of the previously published studies.

The US Supreme Court held that:

In order to qualify as 'scientific knowledge' an inference or assertion must be derived by the scientific method. Proposed testimony must be

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<sup>107</sup> Federal Rules of Evidence (FRE) 702

<sup>108</sup> An example of a dominant theory being wrong is the orthodoxy in the twentieth century that the main predisposing causative agents for stomach cancer and peptic ulcers were stress and diet. In 2005 Marshall and Warren won the Nobel Prize for Medicine for the discovery that the bacterium *Helicobacter pylori* was the main causative agent. Press Release: The 2005 Nobel Prize in Physiology or Medicine to Barry J. Marshall and J. Robin Warren". *Nobelprize.org*. Nobel Media AB 2014.

[https://www.nobelprize.org/nobel\\_prizes/medicine/laureates/2005/press.html](https://www.nobelprize.org/nobel_prizes/medicine/laureates/2005/press.html) accessed 30 Dec 2017.

supported by appropriate validation – i.e. ‘good grounds’, based on what is known. In short, the requirement that an expert’s testimony pertain to ‘scientific knowledge’ establishes a standard of evidentiary reliability.<sup>109</sup>

In reaching their decision, the court identified the following as factors that must be established in order for expert evidence to be admissible.

- (1) whether the theory or technique in question can be and has been tested;
- (2) whether the theory has been subjected to peer review and publication;
- (3) its known or potential error rate;
- (4) whether it has attracted widespread acceptance within a relevant scientific community.<sup>110</sup>

The court was at pains to note that these were guidelines and as such were flexible and not to be regarded as exhaustive. The applicability of *Daubert* was extended in two further judgments that confirmed its general application included expert evidence relating to matters that do not rely on the scientific method.<sup>111</sup>

With the recommendation in LC325 that a *Daubert* style test should form the core of a new statutory reliability test and with its subsequent incorporation into the CrimPR, it is now for practical purposes established as law in England and Wales. It should, however, be noted that even after 24 years the *Daubert* standard is not without its critics in the US, with a number of states still retaining the *Frye* standard for admissibility of expert evidence.<sup>112</sup>

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<sup>109</sup> *Daubert v Merrell Dow Pharmaceuticals Inc* 509 US 579 (1993) 590

<sup>110</sup> *ibid* 594

<sup>111</sup> *Kumho Tire Co v Carmichael* (1999) 119 S Ct 1167; *General Electric v Joiner* (1997) 118 S Ct 512

<sup>112</sup> J Rosica ‘Supreme Court rejects evidence standard supported by Rick Scott, lawmakers’ *Florida Politics* (6/02/17) <http://floridapolitics.com/archives/232254-supreme-court-rejects-daubert> accessed 21/05/17

## Chapter 4

### Expert Evidence in Criminal Law and the Law Commission – A step in the right direction or missed opportunity?

#### 4.0 Introduction

The Law Commission Consultation Paper 190<sup>113</sup> (CP190), the subsequent report (LC325),<sup>114</sup> and its associated draft bill were formulated following a number of actual or probable miscarriages of justice in which expert opinion evidence had been a core component. The recommendation of the Law Commission was to place the admissibility of expert evidence on to a statutory footing in accordance with the Draft Criminal Evidence (Experts) Bill appended to LC325.

The draft bill was not taken forward by the Ministry of Justice, primarily on the grounds of cost, but it was recommended that key features of the draft bill be taken forward by the CPRC for incorporation into the revised Criminal Procedure Rules (CrimPR)<sup>115</sup> and this was done.

In this chapter, the focus will be initially on the Law Commission consultation, CP190, and LC325. Both the background and the key recommendations will be reviewed, followed by an analysis of the key recommendations within the draft bill, focussing primarily on the proposed statutory reliability test and the associated implications, but also on some elements which were not then taken forward into the CrimPR. Consideration will also be given to the implications of the failure to legislate. The thesis will consider whether the changes to the CrimPR mean (as suggested by Hodgkinson and James) that English courts now have ‘the most comprehensive guidance in the

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<sup>113</sup> Law Commission, *A New Approach to the Determination of Evidentiary Reliability – a consultation*. (Consultation paper No 190, 2009)

<sup>114</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011)

<sup>115</sup> Ministry of Justice *The Government’s response to the Law Commission report: “Expert Evidence in Criminal proceedings in England and Wales”* (Law Com No 325, 2013) para 8-12

common law world'<sup>116</sup> as to assessing the reliability of expert opinion evidence, or whether the failure to implement some of the proposed changes and the failure to legislate represents a lost opportunity and thus 'no change'.

#### **4.1 The Law Commission Consultation Paper No 190 and Law Com No. 325**

##### **4.1.1 Background and Key Recommendations**

Prior to the Law Commission review, the House of Commons Science and Technology Committee had expressed disquiet at the state of expert evidence. The committee was considering plans put forward by the then Home Secretary to develop the Forensic Science Service as a public-private partnership.<sup>117</sup> The aim of the committee was to investigate the likely impact of such a change on both the competitiveness of the service, but also the likely impact on the criminal justice system.<sup>118</sup> They recommended the creation of a Forensic Science Advisory Council to regulate scientific evidence in the UK, noting:

The absence of an agreed protocol for the validation of scientific techniques prior to their being admitted in court is entirely unsatisfactory. Judges are not well-placed to determine scientific validity without input from scientists. We recommend that one of the first tasks of the Forensic Science Advisory Council be to develop a "gate-keeping" test for expert evidence. This should be done in partnership with judges, scientists and other key players in the criminal justice system, and should build on the US *Daubert* test.<sup>119</sup>

The committee also made an assertion which will be key to this thesis with regard to the notion of system, rather than individual failure:

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<sup>116</sup> T Hodgkinson and M James (2015) *Expert Evidence: Law and Practice* (Fourth Edition Sweet and Maxwell 2015) at 3-010(5)

<sup>117</sup> House of Commons Science and Technology Committee: *Forensic Science on Trial Seventh Report of Session 2004-05* at [1]

<sup>118</sup> *ibid* [2]

<sup>119</sup> *ibid* [173]

Expert witnesses have been penalised far more publicly than the judge or lawyers in cases where expert evidence has been called into question. These cases represent a systems failure. Focussing criticism on the expert has a detrimental effect on the willingness of other experts to serve as witnesses and detracts attention from the flaws in the court process and legal system, which, if addressed, could help to prevent future miscarriages of justice.<sup>120</sup>

In 2009, the Law Commission published CP190, a narrowly focused consultation<sup>121</sup> looking at the admissibility of expert opinion evidence in the English and Welsh criminal courts with a focus primarily on the reliability element as per the second limb of *Bonython*. The review noted recent examples of wrongful convictions based on what they regarded as flawed expert opinion evidence,<sup>122</sup> and noting this may be the tip of the iceberg with significant risk that much more unreliable expert opinion evidence was being adduced.<sup>123</sup> The consultation paper opined that:

The criminal courts have adopted a policy of laissez-faire. In effect the courts permit the adduction of expert evidence so long as it is not patently unreliable, so that juries are not denied access to evidence that might be helpful.<sup>124</sup>

The Law Commission considered the approach to reliability in a number of jurisdictions, and on this basis CP190 set out four possible options concerning the admissibility of expert evidence, before provisionally recommending, as per option 4, that a new statutory test should be introduced to determine both the admissibility and reliability of expert evidence. This option proposed:

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<sup>120</sup> Ibid at [170]

<sup>121</sup> Law Commission, *A New Approach to the Determination of Evidentiary reliability – a consultation*. (Consultation paper No 190, 2009)

<sup>122</sup> *R v Dallagher* [2002] EWCA Crim1903; *R v Clarke (No 2)* [2003] EWCA Crim 1020; *R v Cannings* [2004] EWCA Crim 1; *R v Harris* [2005] EWCA Crim 1980.

<sup>123</sup> Law Commission, *A New Approach to the Determination of Evidentiary reliability – a consultation*. (Consultation paper No 190, 2009), 2.26

<sup>124</sup> *ibid* 3.14

(4) An admissibility rule requiring the trial judge to assess the evidentiary reliability of the tendered evidence. In line with the recommendation of the House of Commons' Science and Technology Committee, this option would introduce a test to determine the validity of the methodology and any hypothesis underpinning the expert's evidence (that is a Daubert-type test similar to rule 702 of the United States Federal Rules of Evidence).<sup>125</sup>

Following the consultation exercise, the Law Commission report made further recommendations as to the new statutory test. The four key recommendations were:

(1) that there should be a new test in primary legislation which would prevent the admission of expert opinion evidence which is not sufficiently reliable to be admitted;

(2) that the legislation should permit the trial judge to presume evidentiary reliability (as a matter bearing on admissibility) if there is no appearance of unreliability;

(3) that the legislation should set out the factors the court should take into consideration when applying the reliability test; and

(4) that the legislation should be a new statutory code for the admissibility of expert evidence in criminal proceedings generally, supplanting the various common law admissibility limbs.<sup>126</sup>

It is clear the first three elements relate to reliability and the fourth concerns the codification of the existing common law. The report concludes with a draft Criminal Evidence (Experts) Bill<sup>127</sup> which, had it been taken forward, would have formed this primary legislation.

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<sup>125</sup> *ibid* 4.3

<sup>126</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 1.48

<sup>127</sup> *ibid* p146



The Government response to the recommendations contained within LC325 was muted. While acknowledging concerns regarding the management and admissibility of expert evidence, the cost of such a change was considered insupportable:

The impact assessment published with the Law Commission's recommendations indicates that application of the new test would involve additional pre-trial hearings, with the concomitant additional costs, but without sufficient reliably predictable savings to compensate for those costs. Without certainty ... it is not feasible to implement the proposals in full at this time.<sup>128</sup>

Although the Government response clearly identified resource issues as the reason for rejecting the proposals, Child and Rogers<sup>129</sup> argue that what they describe as 'The Political Red Line' and the political need for 'simple headlines' as two of the major obstacles to criminal law reform. They made the case that as these are driven by politics rather than logic, the need to (at risk of another simple headline) be tough on crime may explain the lack of interest in the changes proposed by this project among others.

The alternative suggested in the government response was that the Criminal Procedure Rules Committee (CPRC) consider amending the CrimPR to go some way to reducing the risks presented by the inappropriate use of unreliable expert evidence.<sup>130</sup> This was indeed the route adopted and the revised CrimPR incorporate most, but not all, of the elements set out in the Law Commission recommendations. Senior judges took a positive view. Even before the revised rules came into force, the Court of Appeal in *R v H*,<sup>131</sup> warned:

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<sup>128</sup> Ministry of Justice *The Government's response to the Law Commission report: "Expert evidence in criminal proceedings in England and Wales"* (Law Com 325) 21 November 2013, para 3

<sup>129</sup> J Child and J Rogers 'Criminal Law Reform Now: A New Reform Network' (2017) 81 *Journal of Criminal Law* 282

<sup>130</sup> Ministry of Justice *The Government's response to the Law Commission report: "Expert evidence in criminal proceedings in England and Wales"* (Law Com 325) 21 November 2013, para 4

<sup>131</sup> *R v H* [2014] EWCA Crim 1555

When these changes occur, a new and more rigorous approach on the part of advocates and the courts to the handling of expert evidence must be adopted. That should avoid misunderstandings about what is (and what is not) appropriately included in an expert's report and so either avoid, or at least render far more straightforward, submissions on admissibility...<sup>132</sup>

Commenting on *R (Wright) v CPS*,<sup>133</sup> which was heard on Appeal in February 2015, therefore prior to the revisions coming into effect, Stockdale and Jackson<sup>134</sup> noted that the approach of the court already seemed to reflect the more rigorous approach outlined in *R v H*.

Commenting on that approach, Ward<sup>135</sup> noted that, even prior to CP190, the Court of Appeal had been paying closer attention to the quality of expert opinion and had been setting guidance as to content; as such, the Law Commission's preferred approach has converged with this tendency from the courts.

While reliability has been afforded an increasingly high profile, this does not appear consistent across the common law jurisdictions. A recent Australian case, *Honeysett v The Queen*,<sup>136</sup> considering the admissibility of identification evidence based on 'anatomical identification', cited with apparent approval the earlier case of *Tang v R*, wherein Spiegelman CJ 'cautioned against introducing an extraneous idea such as 'reliability' into the determination of admissibility.'<sup>137</sup>

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<sup>132</sup> *ibid*, per Sir Brian Leveson P [44]

<sup>133</sup> *R (on the application of Wright) v CPS* [2015] EWHC 628 (Admin)

<sup>134</sup> M Stockdale and A Jackson 'Admissibility of Expert Evidence and Criminal Practice Direction Part 33A: *R (on the application of Wright) v Crown Prosecution Service* [2015] EWHC 628 (Admin)' (2015) 79 *Journal of Criminal Law* 246

<sup>135</sup> T Ward 'Expert Evidence and the Law Commission: Implementation Without Legislation' (2013) 7 *Criminal Law Review* 561

<sup>136</sup> *Honeysett v The Queen* [2014] HCA 29 [27]

<sup>137</sup> *Tang v R* [2006] NSWCCA 167 [137]

This is clearly not the view of the English and Welsh judiciary nor the Law Commission, which have each put reliability at the core of the proposed changes. It is also worth noting that the draft bill largely restated the existing common law rules regarding assistance, expertise, and impartiality. The Law Commission noted that this appears uncontroversial; however the decision to exclude a wider consideration of the law relating to these matters was described by Ian Dennis as 'facile' in a *Criminal Law Review* editorial<sup>138</sup> at the time the review launched.

Having adopted the route of formal reliability testing, it is hoped this will ensure that any expert testimony that comes before a jury is fit for purpose. While it is always possible for a judge to rule that an element of testimony, expert or otherwise, is inadmissible after or while it is being presented to the jury, there is both research and case law which indicates that so-called 'directed forgetting' when the jury are directed to ignore the presented testimony may not happen consistently. Steblay et al.<sup>139</sup> undertook a meta-analysis of 48 studies with 8,474 participants considering the effect on juror verdicts of judicial instruction to ignore inadmissible evidence. The key finding was that a direction to ignore the inadmissible evidence does not eliminate its effect. The authors did note that if the jurors were given a rationale for the inadmissibility then compliance was increased.

The courts, it seems, operate under a pragmatic view that juries do as the judge directs. This is well summarised in the US case *Richardson v Marsh*:

...the rule that juries are presumed to follow their instructions is a pragmatic one, rooted less in the absolute certitude that the presumption is true than in a belief that it represents a reasonable practical accommodation of the interests of the state and the defendant in the criminal justice process.<sup>140</sup>

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<sup>138</sup> Editorial 'Examining Expert Evidence' (2009) 6 *Criminal Law Review* 387

<sup>139</sup> N Steblay, HM Hosch, SE Culhane and A McWethy 'The Impact on Juror Verdicts of Judicial Instruction To Disregard Inadmissible Evidence: A Meta-Analysis' (2006) 30 *Law and Human Behavior* 469

<sup>140</sup> *Richardson v Marsh* 481 US 200 (1987) 211

Although this may be a pragmatic view of the situation, a very practical example of the difficulty is illustrated by the case *R v Boyes*.<sup>141</sup> During the judge's summing up, the complainant's mother shouted from the public gallery that there had been other similar complaints of rape against the accused. Although the judge noted he was uncertain as to what had been said he directed the jury to ignore the outburst. On appeal the conviction was quashed with Watkins LJ noting:

...one can hardly think of more damaging and prejudicial information being taken in to the jury room, which obviously should not have been there.<sup>142</sup>

While this case did not relate to expert evidence, it clearly illustrates the difficulty when inadmissible material is placed before a jury (even if the means were unorthodox), and thus the importance of prior screening by the judge.

#### **4.1.2 Failure to Legislate: Art.6 Implications?**

Before examining the proposal more closely, it is important to note at the outset that while the government recognised the concerns about the issues raised by the use of unreliable expert evidence, it rejected the recommendations of the LC325 and the draft bill.

Arguably, the acknowledgment by the government that there was an 'issue' with the reliability of expert evidence and then a decision not to pursue the recommended course of action to address this may raise questions with regard to Art 6 of the European Convention of Human Rights (ECHR) – the Right to a Fair Trial.

From the pragmatic viewpoint, the decision of the government to ask the CPCR to amend the CrimPR would seem to evidence recognition of the concern and steps to address the issue.

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<sup>141</sup> *R v Boyes* [1991] Lexis Citation 2948

<sup>142</sup> *ibid* 4

Looking to the case law from the ECHR, Art. 6(3) sets out the minimum rights<sup>143</sup> of anyone charged with a criminal offence. While there is no specific mention within this section regarding assessment of reliability of expert testimony, guidance from the European Court of Human Rights<sup>144</sup> notes that the determination of reliability of expert evidence sits with the domestic courts,<sup>145</sup> this was recently affirmed in the case *Matytsina v Russia*.<sup>146</sup> The clearly stated position of the court was that:

...under Article 6 it is normally not the Court's role to determine whether a particular expert report available to the domestic judge was reliable or not... the general rule is that the domestic judge has a wide discretion in choosing amongst conflicting expert opinions and picking one which he or she deems consistent and credible.<sup>147</sup>

As such, it is argued that raising concerns with regard to Art. 6 are unlikely to be fruitful, both pragmatically and on the basis of European case law, with regard to the decision not to legislate.

#### **4.1.3 The Proposal**

As set out in the draft Bill:

1(2) ...expert opinion evidence is admissible in criminal proceedings only if it is sufficiently reliable to be admitted

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<sup>143</sup> (a) to be informed promptly, in a language which he understands and in detail, of the nature and cause of the accusation against him; (b) to have adequate time and facilities for the preparation of his defence; (c) to defend himself in person or through legal assistance of his own choosing or, if he has not sufficient means to pay for legal assistance, to be given it free when the interests of justice so require; (d) to examine or have examined witnesses against him and to obtain the attendance and examination of witnesses on his behalf under the same conditions as witnesses against him; (e) to have the free assistance of an interpreter if he cannot understand or speak the language used in court.

<sup>144</sup> European Court of Human Rights *Guide on Article 6 of the European Convention on Human Rights Right to a Fair Trial* (Updated 30/04/19)

<sup>145</sup> *ibid* para 147

<sup>146</sup> *Matytsina v Russia* [2014] Application no 58428/10

<sup>147</sup> *ibid* [169]

The statutory test is that expert opinion evidence is sufficiently reliable to be admitted if:

4(1)(a) the opinion is soundly based, and

(b) the strength of the opinion is warranted having regards to the grounds on which it is based.<sup>148</sup>

The bill does not differentiate scientific from non-scientific evidence, but the 2016 report of the President's Council of Advisors on Science and Technology (PCAST) in the US usefully sets out the facets required for scientific reliability.

For scientific validity and reliability, the procedures leading to the evidence, based on empirical studies, must be shown to be repeatable, reproducible, and accurate. Repeatable means that, with known probability, an examiner obtains the same result, when analysing samples from the same sources. Reproducible means that, with known probability, different examiners obtain the same result, when analysing the same samples. By 'accurate,' we mean that, with known probabilities, an examiner obtains correct results both (1) for samples from the same source (true positives) and (2) for samples from different sources (true negatives). Thus for scientific reliability there will ideally be repeatability, reproducibility, and accuracy.<sup>149</sup>

The PCAST report clearly identifies that it is using the term reliability in the scientific rather than the legal sense,<sup>150</sup> and it may be that the tension between the two forms of use gives rise to uncertainty in some cases. This reason for this tension according to

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<sup>148</sup> Draft Criminal Evidence (Experts) Bill, in LC 325, 2011: Appendix A, Clause 4(1)

<sup>149</sup> Executive Office of the President *President's Council of Advisors on Science and Technology Forensic Science in the Criminal Courts: Ensuring Scientific Validity of Feature Comparison Methods* September 2016

<sup>150</sup> *ibid* fn 107

Faigman and Lesikar<sup>151</sup> is that there is a fundamental disconnect between how scientists and lawyers view the world:

Whereas scientists typically collect data in order to make general statements about phenomena, these general phenomena are employed in the courtroom to make statements about individuals.<sup>152</sup>

The authors go on to give the example from *Daubert*, where the challenge was to prove that the general phenomena that some women who took Bendectin developed birth defects, was then translated into whether Jason Daubert's birth defects were the result of the Bendectin his mother took.

Nance,<sup>153</sup> commenting on the construction of Rule 702<sup>154</sup> of the US Federal Rules of Evidence, notes the apparently binary mode of expression being used in relation to reliability: Either something is considered reliable or it is not. Nance further notes that in *Daubert*, reliability in the majority opinion is allied to the notion of 'trustworthiness', although noting that this is only a brief mention in the footnotes, as such it does not seem unreasonable to speculate that the US Supreme Court did not feel the need to give clear definition to the meaning of reliability beyond its everyday use as trustworthiness.

Considering the term *sufficient reliability* Nance argues that this construction may have to be avoided because as a requirement it is largely meaningless in the absence of 'some reasonably determinate algorithm based on appropriate legal norms'<sup>155</sup> which would guide as to the degree of reliability that is sufficient.

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<sup>151</sup> DL Faigman and C Lesikar 'Organised Commonsense: Some Lessons From Judge Jack Weinstein's Uncommonly Sensible Approach to Expert Evidence' (2014) 64 *DePaul Law Review* 421

<sup>152</sup> *ibid* 422

<sup>153</sup> D Nance 'Reliability and the Admissibility of Experts' (2003) 34 *Seton Hall Law Review* 191

<sup>154</sup> Rule 702 (c) The testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

<sup>155</sup> D Nance 'Reliability and the Admissibility of Experts' (2003) 34 *Seton Hall Law Review* 191, 197

This, it is argued, potentially gives rise to a situation wherein expert evidence at a criminal trial might involve prosecution experts saying X and defence experts saying not X but Y – and yet no expert’s evidence is admissible unless it is ‘sufficiently reliable’ so it must follow that expert evidence may be ‘sufficiently reliable’ but still wrong. This is illustrated by one of the elements of the expert evidence in *R v Cannings*<sup>156</sup> wherein multiple experts gave conflicting testimony. Angela Cannings was initially found guilty of murdering two of her infant sons, but these convictions were quashed on appeal.

Two experts, Professors Berry and Rushton, took different views of the significance of haemosiderin found at post mortem in the lungs of one of the children. Haemosiderin is the iron left from the breakdown of haemoglobin following a bleed, and was one of the elements considered in the case. To Professor Rushton, the level of haemosiderin was not inconsistent with a natural event or the efforts at resuscitation; on the other hand Professor Berry while ‘not for the moment suggesting the finding was diagnostic of imposed upper airway obstruction’ did regard it as a ‘warning’ and ‘extremely worrying’.<sup>157</sup> Thus two experts, given the same data, reached quite different conclusions, with Professor Berry’s interpretation ultimately seemingly incorrect, but both opinions were regarded as sufficiently reliable to be admitted at the time of the trial.<sup>158</sup>

Noting how heavily dependent on expert evidence the *Cannings* case was, Judge LJ suggested that:

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<sup>156</sup> *R v Cannings* [2004] EWCA Crim 1

<sup>157</sup> *ibid* [68]-[71]

<sup>158</sup> More recent academic research continues to question the use of this marker. G Kernbach-Wighton, Y Albaloooshi and B Madea ‘The Evidential Value of Intra-Alveolar Haemosiderin-Macrophages in Cases of Sudden Infant Death Syndrome’ (2012) 222 *Forensic Science International* 27



...if the outcome of the trial depends exclusively or almost exclusively on a serious disagreement between distinguished and reputable experts, it will often be unwise, and therefore unsafe, to proceed.<sup>159</sup>

In the subsequent case *R v Kai-Whitewind*<sup>160</sup> this position was described by Judge LJ as the 'overblown Cinnings' argument and placed back in a very tightly constrained context.<sup>161</sup>

It is further arguable that the notion that reliability is a binary choice is actually unsupportable in view of how other evidence is considered. Very few forms of evidence (if any) are considered 100% certain,<sup>162</sup> indeed such certainty, while desirable, is not demanded of any other form of evidence before it is adduced.

Indeed one could even argue that the formulation of the verdict in criminal trials 'beyond reasonable doubt'<sup>163</sup> precludes any requirement of absolute certainty. In *R v JL*<sup>164</sup> the jury asked whether the standard of proof was '100% certainty' or 'beyond reasonable doubt' asking what the latter actually means. The trial judge said:

You do not need to be 100% certain. You can decide beyond reasonable doubt. Another way of expressing the words reasonable doubt is sure,... Another way, turning it back, of expressing the word sure is beyond reasonable doubt. What does that mean? A reasonable doubt is the sort of doubt that might affect your minds if you were making decisions in matters of importance in your own affairs, your own lives<sup>165</sup>

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<sup>159</sup> *R v Cinnings* [2004] EWCA Crim 1 [178]

<sup>160</sup> *R v Kai-Whitewind* [2005] EWCA Crim 1092

<sup>161</sup> *ibid* [84]-[90]

<sup>162</sup> In Chapter 5 examination of eye and ear witness identification evidence will demonstrate how evidence which is admissible is still capable of being incorrect.

<sup>163</sup> Crown Court Compendium Part 1 notes that no particular form of words as to the standard of proof is essential, but that what is required is a clear instruction to the jury that they have to be satisfied so that they are sure. At 5-1

<sup>164</sup> *R v JL* [2017] EWCA Crim 621; P McKeown 'Case Comment *R v JL*' (2018) 2 Criminal Law Review 184

<sup>165</sup> *ibid* at [16]

The Court of Appeal endorsed the judge's statement.<sup>166</sup> This formulation follows the earlier authority of *R v Stephens* wherein the Court of Appeal noted that it was unhelpful 'to a jury to seek to draw distinctions between being certain of guilt and being sure of guilt', noting that '[m]ost people would find it difficult to discern any real difference between the two.'<sup>167</sup>

There is also the need to note that while much of the discussion relates to scientific evidence, there is much evidence which is not strictly scientific in the sense described within the PCAST Report of being testable and reproducible, for example much of psychology or psychiatry.

Returning to the Law Commission, the proposed statutory test appears to provide that guidance based on legal norms.

There is a debate as to whether reliability is now a fourth limb of the common law test for admissibility. Practice direction 19 A.4 cites this dictum from *R v Dlugosz*:<sup>168</sup>

...the court must be satisfied that there is a sufficiently reliable scientific basis for the evidence to be admitted. If there is then the court leaves the opposing views to be tested before the jury.<sup>169</sup>

Stockdale and Jackson<sup>170</sup> note that the Law Commission does not make explicit whether this is intended to be a fourth limb of the common law admissibility test, or if it is intended to be a condition that should be satisfied once the other three limbs of the traditional test have been satisfied. Citing the Lord Chief Justice's 2014 Kalisher Lecture to the Criminal Bar Association, they suggest that the case law would support

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<sup>166</sup> *ibid*

<sup>167</sup> *R v Stephens* [2002] EWCA Crim 1529 [15]

<sup>168</sup> *R v Dlugosz* [2013] EWCA Crim 2

<sup>169</sup> *ibid* [11]

<sup>170</sup> M Stockdale and A Jackson 'Expert Evidence in Criminal Proceedings: Current Challenges and Opportunities' (2016) 80 *Journal of Criminal Law* 344

the notion that there is a distinct common law reliability test, and that this was actually already developing prior to LC325.<sup>171</sup>

The draft bill included a guide to what may indicate that expert opinion is possibly insufficiently reliable, these characteristics being incorporated into the Crim PD

19A.6 In addition, in considering reliability, and especially the reliability of expert scientific opinion, the court should be astute to identify potential flaws in such opinion which detract from its reliability, such as:

- (a) being based on a hypothesis which has not been subjected to sufficient scrutiny (including, where appropriate, experimental or other testing), or which has failed to stand up to scrutiny;
- (b) being based on an unjustifiable assumption;
- (c) being based on flawed data;
- (d) relying on an examination, technique, method or process which was not properly carried out or applied, or was not appropriate for use in the particular case; or
- (e) relying on an inference or conclusion which has not been properly reached.

The draft bill also noted a number of generic factors in Schedule 1 relating to the general reliability of expert and especially scientific expert opinion, these factors have subsequently been incorporated into the criminal practice directions at 19A.5.

## **4.2 Analysis**

### **4.2.1 Establishing Sufficient Reliability?**

The Law Commission sets out its aim as being to ensure that the law is fair, modern, simple, and cost effective.<sup>172</sup> The review of expert evidence is the first major review of the law relating to expert evidence, so did the Law Commission use this opportunity to meet that objective?

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<sup>171</sup> *R v Reed* [2009] EWCA Crim 2698 [111]; Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 2.14

<sup>172</sup> Law Commission Home page <https://www.lawcom.gov.uk> accessed 01/03/18

Edmond,<sup>173</sup> while welcoming the Law Commission's recommendations, argues that one of the limitations of the report is that it failed to make a persuasive case for reform, further arguing that for the reforms to work, cultural change is required with lawyers and judges being both willing and able to change. A point forcefully made is that the English legal system purports to be part of a rational tradition, and as such it cannot be appropriate for the state to place unreliable expert opinion before a lay jury.<sup>174</sup>

The Law Commission itself identified that the focus of its work was narrow, and given its assertion that the issues it identified may just be the tip of the iceberg, it seems difficult to argue that there was not a persuasive case for reform. However, the case for cultural change within the review is less clear, although it could be argued that cultural change is implicit as the changes required cannot occur without such change.

Edmond also argues that despite the report recommending change, there is a lack of engagement with legal principle noting that there are 'few direct references to any overarching criminal justice or evidentiary principles, besides the interests of justice.'<sup>175</sup> Edmond and Roach<sup>176</sup> highlight the Canadian Supreme Court as an example of how that jurisdiction has shown recognition of legal principle in its management of expert evidence, placing fairness alongside reliability as a core component of admissibility. Justice Deschamps noting its import in her majority reason in *R v Trochym*:<sup>177</sup>

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<sup>173</sup> G Edmond 'Is Reliability Sufficient? The Law Commission and Expert Evidence in international and Interdisciplinary Perspective (Part 1)' (2012) 16 *The International Journal of Evidence and Proof* 30

<sup>174</sup> The counter argument is that the courts do not prevent an unreliable or biased lay witness from testifying merely because one cannot necessarily trust what they are saying. That was an argument for ruling defendants incompetent as witnesses in their own defence – an argument that was rejected in the Criminal Evidence Act 1898

<sup>175</sup> G Edmond 'Is Reliability Sufficient? The Law Commission and Expert Evidence in international and Interdisciplinary Perspective (Part 1)' (2012) 16 *The International Journal of Evidence and Proof* 30, 41

<sup>176</sup> G Edmond and K Roach 'A Contextual Approach to the Admissibility of the State's Forensic Science and Medical Evidence' (2011) 61 *University of Toronto Law Journal* 343

<sup>177</sup> *R v Trochym* [2007] 1 SCR 239

[R]eliability is an essential component of admissibility. Whereas the degree of reliability required by courts may vary depending on the circumstances, evidence that is not sufficiently reliable is likely to undermine the fundamental fairness of the criminal process.<sup>178</sup>

It is arguable that overarching principles, such as a notion of fairness, fall foul of the content of the impact assessment. The Law Commission, as noted previously, was unable to identify what savings, if any, would result from the changes.<sup>179</sup> At a time of supposed austerity, expenditure of un-determined scale is going to be problematic for the legislature. That does not, however, negate the argument that the Law Commission should have engaged with principle to accept that most fundamental of criminal justice values; the presumption of innocence and the obligation on the Crown to prove guilt beyond reasonable doubt.

Arguably, the lack of overarching principles underpinning the recommendations are further illustrated by the notion in recommendations that:

(2) the legislation should permit the trial judge to presume evidentiary reliability (as a matter bearing on admissibility) if there is no appearance of unreliability;

Such an argument allows the admission of evidence which has not been proved to have evidentiary reliability if it has been previously adduced and is unchallenged. Edwards<sup>180</sup> argues that the courts will continue to admit forensic evidence without consideration of its scientific validity and reliability, simply because this is what they have always done. Noting that the application of the common law seeks constancy and predictability, and a determination that like cases are treated alike, therefore even if the judges recognise that methods used by experts have not been scientifically verified

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<sup>178</sup> *ibid* at [1]

<sup>179</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011) Appendix C page 200

<sup>180</sup> HT Edwards *Reflections on the findings of the Committee on Identifying the Needs of the Forensic Science Community* (First Meeting of the National Commission on Forensic Science Washington DC Feb 3 2014)

they will continue to accept such evidence on the basis it has been relied on for many years. Cuttingly states that 'each ill-informed decision becomes a precedent binding on future cases.'<sup>181</sup> it is worth noting that this is, strictly speaking, not entirely accurate as only appellate court decisions can be binding, however the apparent disquiet underpinning the claim is clear.

Arguably the changes to the CrimPR may begin to address some elements of this if one considers the robust challenge to proposed expert evidence, highlighting the then pending changes, within the judgment in *R v H*,<sup>182</sup> however it is possible that such robust challenge may not be universal.

Edwards goes on to illustrate this point, which he describes as a 'stunning *non sequiter*, with the 2009 decision *US v Baines*<sup>183</sup> regarding fingerprint evidence. The court noted that:

the record [did] not show that the [fingerprinting] technique has been subject to testing that would meet all the standards of science.

But then went on to rule that:

fingerprint identification has been used extensively by law enforcement agencies all over the world for almost a century.<sup>184</sup>

It is argued that such reasoning creates a presumption of admissibility, with no requirement to prove that a technique is scientifically valid despite the ruling in *Daubert*, that a 'trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant but reliable,'<sup>185</sup> further noting 'evidentiary

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<sup>181</sup> *ibid* 3

<sup>182</sup> *R v H* [2014] EWCA Crim 1555 [43]-[44]

<sup>183</sup> *US v Baines* 573 F3d 979 (2009)

<sup>184</sup> *ibid* at 990

<sup>185</sup> *Daubert v Merrell Dow Pharmaceuticals Inc* 509 US 579 (1993), 589

reliability will be based upon scientific validity'.<sup>186</sup> However, the US Supreme Court under rule 702 noted that the obligation of the court with respect to these inquiries was 'flexible'<sup>187</sup> and expressed confidence that the 'vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are traditional and appropriate means of attacking shaky but admissible evidence'.<sup>188</sup>

This confidence in fingerprint identification evidence would seem to be echoed in LC325, wherein the Law Commission noted that 'it would not be necessary to question assumptions or well established theories about which there was no meaningful dispute',<sup>189</sup> further citing the unlikelihood of two individuals sharing a complete fingerprint and that judicial notice has been taken of the uniqueness and permanence of fingerprints.<sup>190</sup>

There are, however, two relatively recent reports which starkly illustrate the effect of lack of robust challenge/overstatement of the reliability of expert evidence. While fingerprint identification evidence has been used successfully for many years, the potential limits of the practice were well highlighted in the findings from the Scottish Fingerprint Inquiry<sup>191</sup> which followed the misidentification of a fingerprint at a crime scene, wrongly attributing the fingerprint to a serving police officer Detective Constable McKie. While accepting that there was no reason to suggest fingerprint comparison was inherently unreliable, two of the key findings were that:

9. Fingerprint examiners are presently ill-equipped to reason their conclusions as they are accustomed to regarding their conclusions as a matter of certainty and seldom challenged.

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<sup>186</sup> *ibid* 590

<sup>187</sup> *ibid* 594

<sup>188</sup> *ibid* 596

<sup>189</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011) para 3.65

<sup>190</sup> *ibid* fn65

<sup>191</sup> *The Fingerprint Inquiry Report Scotland* (2011) A fingerprint from a Scottish detective constable (McKie) was identified at a murder scene in 1997. McKie denied having been in the house where the print was detected. She was prosecuted for perjury following the murder trial as she denied having entered the house. Ms McKie was acquitted and following a high profile campaign the Fingerprint Inquiry was established and concluded that the mis-identified print was because of human error.

10. There is no reason to suggest that fingerprint comparison in general is an inherently unreliable form of evidence but practitioners and fact-finders alike require to give due consideration to the limits of the discipline.<sup>192</sup>

If one considers the practical implications of revisiting areas of expert evidence, such as fingerprint analysis, it seems highly unlikely that a law enforcement agency or a university would look to fund research to establish the scientific base required to fully address the concerns highlighted by Edwards. As such, it seems probable that established fields such as this will continue as they are, with ongoing low level academic and legal commentary, until or unless a result as per McKie comes to light where there is no human error and duplicate prints are detected.

Also of concern is where the scientific weight of evidence is over-stated to the courts. A recent example is the 2015 review<sup>193</sup> of FBI expert testimony relating to microscopic hair analysis, which found that there were errors in 90% of the trial transcripts that investigators reviewed. The review notes that in the 268 cases where examiners provided testimony used to inculcate a defendant at trial, erroneous statements were made in 257 (96%) of the cases. Defendants in at least 35 of these cases received the death penalty and errors were identified in 33 (94%) of those cases. Nine of these defendants have already been executed and five died of other causes while on Death Row.

The review was damning, concluding that:

These findings confirm that FBI microscopic hair analysts committed widespread, systematic error, grossly exaggerating the significance of

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<sup>192</sup> Fingerprint Inquiry chapter 42 Key findings 9 and 10

<sup>193</sup> FBI Press Release 'FBI Testimony on Microscopic Hair Analysis Contained Errors in at Least 90 Percent of Cases in Ongoing Review'(20 April 2015)

<https://www.fbi.gov/news/pressrel/press-releases/fbi-testimony-on-microscopic-hair-analysis-contained-errors-in-at-least-90-percent-of-cases-in-ongoing-review> accessed 09/06/19



their data under oath with the consequence of unfairly bolstering the prosecutions' case<sup>194</sup>

Cole and Duster<sup>195</sup> talk about the danger of overselling science, noting that the FBI trained analysts then trained state level examiners. Cole and Duster observed:

FBI analysts without sufficient data to estimate the weight of their hair comparison evidence resorted to vague but overstated verbal formulations of certainty.<sup>196</sup>

Going on to discuss how a change in the definition of accuracy caused the FBI to re-designate reports formally deemed accurate into 'inaccurate', Cole and Duster describe this as an example of the way in which 'scientific knowledge changes through the social consensus of its practitioners'. In this case the science did not change, it was the agreement and understanding which changed such that the emerging paradigm became that it was not scientifically acceptable to attribute such weight to results without having a reliable estimation of the donor population

The final outcome of this was the director of the FBI writing to all states advising them that FBI examiners had gone beyond the range of the science when testifying, prior to the addition of mitochondrial DNA testing of hairs in 1999.<sup>197</sup>

This issue of reliability of forensic sciences in expert evidence was directly addressed by the American National Academy of Sciences (NAS) in the 2009 paper, *Strengthening Forensic Science in the United States: A path forward*.<sup>198</sup> It is important to note that unlike the Law Commission this review focussed on expert evidence adduced by the

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<sup>194</sup> *ibid*

<sup>195</sup> SA Cole and T Duster 'Microscopic Hair Comparison and the Sociology of Science' (2016) 15 *Contexts* 28

<sup>196</sup> *ibid* 33

<sup>197</sup> J Comey 'Director Comey Letter to Additional Governors on State Reviews' (June 10, 2016) <https://www.fbi.gov/file-repository/second-governor-letter-061016.pdf/view> accessed 10/06/19

<sup>198</sup> National Research Council of the National Academies *Strengthening Forensic Science in the United States: a path forward* (The National Academies Press Washington DC 2009)

state and that evidence was either medical or institutional forensic science. Consequently, subjects not being regarded as part of 'hard science' – such as psychiatric and psychological expert evidence – were excluded.

The report highlighted and focussed on a wide range of forensic science disciplines including hair and fibre evidence, analysis of explosives and fire debris evidence, forensic odontology, and biological evidence.<sup>199</sup>

The seemingly damning conclusion was that:

[W]ith the exception of nuclear DNA analysis....no forensic method has been shown to have the capacity to consistently, and with a high degree of certainty, demonstrate a connection between evidence and a specific individual or source.<sup>200</sup>

Taken at face value, this statement would seem to devalue all forms of scientific non-DNA evidence currently placed before the courts. However, the NAS report acknowledges that areas of evidence which do not meet the standards set by nuclear DNA analysis are still potentially of use for investigatory and exclusionary purposes.<sup>201</sup> It should also be noted that despite the concerns raised by this report, a wide range of techniques are regularly admitted as expert evidence despite not meeting the highest scientific standard. It can be argued that the reality of the situation is that many forms of expert scientific evidence have evolved and been presented successfully for many years before the advent of the NAS report providing useful circumstantial evidence to the courts to provide the threads which build the case.

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<sup>199</sup> Full list of disciplines reviewed biological evidence/controlled substances/fraction ridge analysis/shoe prints and tyre tracks/toolmarks and firearms identification/hair and fibre evidence/questioned document examination/analysis of paint and coating evidence/explosives and fire debris/digital and multimedia analysis

<sup>200</sup> National Research Council of the National Academies *Strengthening Forensic Science in the United States: a path forward* (The National Academies Press Washington DC 2009), 7

<sup>201</sup> *ibid* 127 Fn 1

Edmonds notes of the NAS report that its ramifications are international, in that if there is no research supporting the reliability and validity of a techniques in the US, it is highly likely there is no research elsewhere.<sup>202</sup> Given the international state of much research, this seems, intuitively, a reasonable conclusion.

Both the Law Commission and US Supreme Court expressed confidence that the 'vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are traditional and appropriate means of attacking shaky but admissible evidence'<sup>203</sup> and thus an appropriate mechanism for challenging the reliability of evidence.

However, this view is not universally held. The Honorable HT Edwards, a Senior Circuit Judge in the US Court of Appeals for the DC circuit, and co-chair of the NAS report reflecting on the findings noted that:

Judicial review, by itself, will not cure the infirmities of the forensic community.<sup>204</sup>

He argues strongly that it is an erroneous assumption that once lawyers begin to introduce the finding of the report into the courts, judges would begin to limit the admissibility of elements of forensic evidence and thus deliver decisions which would then lead to reform of the relevant disciplines.

Perhaps disturbingly, given the reliance on *Daubert* by the Law Commission, the National Academy finds that the application of *Daubert* within the federal appellate courts in criminal cases:

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<sup>202</sup> G Edmond 'Is Reliability Sufficient? The Law Commission and Expert Evidence in international and Interdisciplinary Perspective (Part 1)' (2012) 16 *The International Journal of Evidence and Proof* 30, 44

<sup>203</sup> *Daubert v Merrell Dow Pharmaceuticals Inc* 509 US 579 (1993) 596

<sup>204</sup> HT Edwards (2014) *Reflections on the findings of the National Academy of Sciences Committee on Identifying the Needs of the Forensic Science Community at the First Meeting of the National Commission on forensic science* Feb 3, 2014

...have not with any consistency or clarity imposed standards ensuring the application of scientifically valid reasoning and reliable methodology in criminal cases involving *Daubert* questions.<sup>205</sup>

These findings are well illustrated by a 2002 study in which Groscup et al.<sup>206</sup> undertook a study of 693 federal and state criminal appellate decisions between 1988 and 1998 where expert evidence was involved, so 'before' and 'after' *Daubert*. The outcome was that there had been no change in the levels of expert testimony being admitted, and that while, perhaps unsurprisingly, there was increased discussion regarding *Daubert*, there was little discussion of the four *Daubert* criteria. Groscup et al. concluded that 'if judges lack a true understanding of the criteria, they will likely be applied only infrequently, as observed.'<sup>207</sup>

The revised rules have at their core the requirement that the judge plays an active role in gate-keeping the evidence coming before the court. One of the possible approaches which has seen use in the civil courts in a number of jurisdictions including England and Wales is 'hot tubbing' or concurrent evidence. While not specifically referenced within LC325, the relevance of this approach is that it is one possible way to manage expert testimony, such that areas of agreement and disagreement are highlighted thus enabling the court to focus on the areas where differences in expert opinion exist. Genn<sup>208</sup> reports on an evaluation undertaken of the concurrent evidence (hot tubbing) pilot undertaken in the Manchester Technology and Construction Court. Although concurrent evidence is not a feature of criminal trials,<sup>209</sup> arguably the evaluation of the

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<sup>205</sup> National Research Council of the National Academies *Strengthening Forensic Science in the United States: a path forward* (The National Academies Press Washington DC 2009), 96

<sup>206</sup> J Groscup, S Penrod, C Studebaker, M Huss and K O'Neil 'The Effects of *Daubert* on the Admissibility of Expert Testimony in State and Federal Criminal Cases' (2002) 8 *Psychology, Public Policy & Law* 339

<sup>207</sup> *ibid* 371

<sup>208</sup> H Genn 'Getting to the Truth: Experts and Judges in the "Hot Tub"' (2013) 32 *Civil Justice Quarterly* 275

<sup>209</sup> It should be noted that CrimPR 19.6(2) allows that the court may direct a meeting of experts to allow preparation of a statement of areas of agreement and disagreement. Such preparation was highlighted in *R v Henderson* [2010] EWCA Crim 1269 [210]. The potential use of concurrent evidence within criminal cases will be examined in chapter 5.

pilot is of relevance because, in a similar way to concurrent evidence, gatekeeping will require greater preparation and familiarity with the material.

It is important to note that the evaluation discussed in the Genn paper relates to 20 questionnaires returned by judges, solicitors and barristers, and experts involved in the four cases that went to trial within the pilot, as such it is a small scale study. The paper identifies the need for greater preparation on the part of judges, quoting one judge who reported:

I needed to pre-read in more detail for this procedure. I needed to understand the issues and raise questions to try and get the experts to flesh out why they came to a different view.

Solicitor and barrister respondents both noted that for such a procedure to work effectively it was dependent on the judge being well-prepared and expressing concerns about more junior or poorly prepared judges. Arguably this reflected the comment in LC325 that the effectiveness of the proposed changes:

...depends on legal practitioners and trial judges having an understanding of the factors bearing on evidentiary reliability and on their being willing to adopt a more critical, enquiring approach to expert evidence.<sup>210</sup>

The need for an enquiring approach must surely run in parallel with the need for evidence to be demonstrably reliable when that assurance is sought. The application of hot tubbing is considered in more detail in Chapter 5.

#### **4.2.2 Sufficient Reliability and Non-Scientific Expert Opinion Evidence**

While some evidence is scientific and, as such, amenable to scientific levels of proof, much evidence that comes before the courts is not, and arguably raises a different set of questions. The Law Commission appears to take a fairly pragmatic view of such non-

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<sup>210</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 8.4

scientific evidence observing that their new reliability test is not limited to scientific evidence and that the test will occasionally need to be applied, giving the example of lip reading.<sup>211</sup>

The issue of testing the methodologies of experts in non-scientific fields was addressed in *Kumho Tire Co* wherein the court noted of the gatekeeper function that:

It is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigour that characterises the practice of an expert in the relevant field.<sup>212</sup>

More recently, the Ontario Court of Appeal noted that there was no closed list of the factors relevant to the reliability of a non-scientifically based opinion, the case *R v Abbey*<sup>213</sup> related to Canadian gang culture. The issue in this case was the meaning of a tattoo worn by the accused. The expert in this case, Dr Totten, had gained his knowledge from years spent studying and publishing about gang culture. At the trial of first instance, the judge characterised Dr Totten's knowledge as a novel scientific theory and attempted to apply the *Daubert* criteria, consequently ruling the evidence inadmissible. The Court of Appeal asserted this was a mischaracterisation and that the correct question to ask was not whether the opinion was scientifically valid, but rather

...whether his research and experiences had permitted him to develop a specialised knowledge about gang culture, and specifically gang symbology, that was sufficiently reliable to justify placing his opinion as to the potential meanings of the teardrop tattoo within that culture before the jury...<sup>214</sup>

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<sup>211</sup> *ibid* 5.71

<sup>212</sup> *Kumho Tire Co v Carmichael* (1999) 119 S Ct 1167, 152

<sup>213</sup> *R v Abbey* 2009 ONCA 624

<sup>214</sup> *ibid* [117]

The court as part of a detailed and lengthy examination of Dr Totten's methodology went on to list the possible factors appropriate to the type of opinion advanced.<sup>215</sup> The similarity between the factors put forward by the Ontario Court of Appeal and those listed by the Law Commission (as listed in footnote 219 below) was striking and the Law Commission note this case as an example of such an occasional need to assure itself of the evidential reliability of non-scientific evidence.<sup>216</sup>

LC325 also clarifies that the situation with regard to some professional, non-scientific disciplines is that practices which are well-established do not require further assessment or testing as to their reliability.<sup>217</sup> This, it seems, is a pragmatic position and perhaps a recognition of the impossibility of having the situation where routine cases could for example demand proof of the validity of fingerprint evidence.

It is arguably of some concern that the Law Commission notes that 'clearly it would not always be necessary to apply the reliability test to evidence of this sort. Indeed,..., the only real issue for the court in most cases is likely to be whether or not the witness has the skill to provide such evidence'.<sup>218</sup> This could be viewed as a return to the situation in *Bonython* wherein it is about the expert proving they are indeed an expert, rather than evidencing the reliability of their opinion. However, the generic factors listed which were listed in the draft Bill and are now incorporated in to the Crim PD 19A 5<sup>219</sup>

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<sup>215</sup> *ibid* [119]

<sup>216</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011) fn 79

<sup>217</sup> *ibid* 5.76

<sup>218</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 5.72

<sup>219</sup>(a) the extent and quality of the data on which the expert's opinion is based, and the validity of the methods by which they were obtained; (b) if the expert's opinion relies on an inference from any findings, whether the opinion properly explains how safe or unsafe the inference is (whether by reference to statistical significance or in other appropriate terms); (c) if the expert's opinion relies on the results of the use of any method (for instance, a test, measurement or survey), whether the opinion takes proper account of matters, such as the degree of precision or margin of uncertainty, affecting the accuracy or reliability of those results; (d) the extent to which any material upon which the expert's opinion is based has been reviewed by others with relevant expertise (for instance, in peer-reviewed publications), and the views of those others on that material; (e) the extent to which the expert's opinion is based on material falling outside the expert's own field of expertise; (f) the completeness of

can be applied to non-scientific as well as scientific disciplines. The Law Commission notes how the reliability test could be applied to non-scientific disciplines, giving the example of the elements which could potentially be applied in the context of forensic accountancy.<sup>220</sup> It should also be noted that although the Law Commission identifies the separation of scientific from non-scientific expert opinion, in the revised CrimPR and practice directions no such distinction is made.

#### **4.2.3 Education and Training for Legal Professionals**

It is important that any consideration of training and education recognises that although both judiciary and lawyers are part of the same criminal justice system, they serve very different functions within that structure with regard to the presentation and management of expert evidence.

Although solicitors and barristers are officers of the court, their responsibility to their clients are clearly set out in the relevant professional guidance, with the need for effective advocacy skills being highlighted for barristers.<sup>221</sup> As such, while their role in relation to expert testimony is to ensure that expert reports meet the requirements of the CrimPR and to work with the experts retained to gain the necessary base line knowledge and understanding to be able to cross examine, there is also the requirement to present that evidence in such a way as to support their client's case.

To do this effectively, they need to have sufficient understanding of the evidence to be able to ensure it is presented in such a way that a jury will follow and understand.

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the information which was available to the expert, and whether the expert took account of all relevant information in arriving at the opinion (including information as to the context of any facts to which the opinion relates); (g) if there is a range of expert opinion on the matter in question, where in the range the expert's own opinion lies and whether the expert's preference has been properly explained; and (h) whether the expert's methods followed established practice in the field and, if they did not, whether the reason for the divergence has been properly explained.

<sup>220</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 5.78 notes that a forensic accountant from the SFO indicated that factors (a), (f) and (g) could be material to determining the reliability of expert evidence within that field.

<sup>221</sup> Bar Standards Board 'Future Bar Training Professional Statement for Barristers (September 2016)' *Solicitors Regulation Authority Handbook Part 1: SRA Principles 2011*

<https://www.sra.org.uk/solicitors/handbook/handbookprinciples/part2/content.page>  
accessed 27/05/19



While the expert will be doing the actual presentation, the advocate needs to have the understanding to ensure the key points are pulled out, and also to be aware if the presentation is not being understood by the jury, although it should be noted that in some cases that such lack of clarity or understanding may be exploited by the advocate to bolster their case.

For such legal professionals, the report notes they or their employers would be expected to bear the cost, with the expectation that this training would become part of the training already authorised by the Solicitors Regulation Authority and the Bar Standards Board. An interesting point within this recommendation is that this applies to those 'who choose to undertake training to assist their work in this regard'.<sup>222</sup> While this may simply mean that practitioners who do not deal with expert testimony need not undertake this training, it also makes clear that such training is not mandatory, which arguably may be a weakness.

It should be noted that the Solicitors Regulation Authority requirements with respect to Continuing Professional Development (CPD) since November 2016 has been that there is no minimum requirement for CPD hours, rather the requirement is that:

...you should now reflect on the quality of your practice and identify any learning and development needs. You can then address these needs to make sure your knowledge and skills are up to date and that you are competent to practice.<sup>223</sup>

A clear concern with such guidance may be that relying on the individual to identify they have the learning need, may not lead to those who actually have the learning need accessing the relevant learning.

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<sup>222</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), p182

<sup>223</sup> Solicitors Regulation Authority Continuing Competence  
<http://www.sra.org.uk/solicitors/cpd/tool-kit/continuing-competence-toolkit.page> accessed 29/04/19

Such a programme of self-certification without robust checking, it is argued, leaves the way open for 'tick box' personal development. It can be argued that the effect of lack of robust checking of self-certification was seen in the context of the changes made by the Nursing and Midwifery Council (NMC) following the Report of the *Mid Staffordshire NHS Foundation Trust Public Inquiry* which lead to wholesale changes in the way CPD is registered by that regulatory body.<sup>224</sup>

There is clear evidence that the relevant authorities are developing guidance/education as to the use of expert evidence.<sup>225</sup> It should, however, be noted that there is emerging academic concern as to the robustness of this approach. Wortley and Ward,<sup>226</sup> in reviewing the recently published *Guidance on the Preparation, Admission and Examination of Expert Evidence* from the Inns of Court College of Advocacy, describe the advice contained within the document as 'so generic and superficial as to afford little real guidance to the criminal practitioner.'<sup>227</sup>

For judges, a central component of the CrimPR is establishing their function as gatekeeper. The impact assessment within LC325 notes that training for judges is required to inform them 'about the new law and procedure; and to guide judges in the

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<sup>224</sup> *The Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry*, led by Sir Robert Francis QC looked into serious failings at the Mid Staffordshire Hospital and made many wide ranging recommendations. These included recommendations around professional regulation. With regard to nursing regulation recommendation No 194 was that each registered nurse's appraisal and portfolio of professional evidence should be countersigned by an appraising manager to confirm its accuracy. Also, that the portfolio should be available to the NMC, if requested as part of a nurse's revalidation process, with the NMC selecting a sample of revalidation applications for verification. Guidance can be found via NMC on-line <https://www.nmc.org.uk/globalassets/sitedocuments/revalidation/verification-guidance-sheet.pdf> accessed 29/04/19

<sup>225</sup> The Inns of Court College of Advocacy *Guidance on the Preparation, Admission and Examination of Expert Evidence* (2017) The Council of the Inns of Court; The Judicial College prospectus for Courts' Judiciary April 2019-March 2020 includes a seminar on admissibility of evidence, including forensic evidence, while there is no specific mention of the CrimPR r19 in the prospectus this appears to give an overview of the topics to be delivered rather than a detailed syllabus.

<sup>226</sup> N Wortley and T Ward 'Promoting Reliability in Expert Evidence?' (2019) *Criminal Bar Quarterly* May, 10

<sup>227</sup> *ibid* 11

practical application of the reliability test'.<sup>228</sup> The assessment recommends that the training is delivered via the Judicial Studies Board (now the Judicial College).

While the Law Commission does not foresee the challenges of educating the judiciary to exercise this function as being insurmountable, some authors disagree.<sup>229</sup> Dennis<sup>230</sup> notes that nothing in the CrimPR compels judges to enquire into the listed factors, adding that although judges are 'actively encouraged' to do so, it is possible that some may still prefer to take the more traditional route of leaving the matter to the jury in the case of complex contested evidence.

The Judicial College is directly responsible for training judges in the courts of England and Wales and is also responsible for overseeing the training of magistrates.<sup>231</sup> The current Judicial Skills and Abilities Framework<sup>232</sup> makes no specific reference to expert evidence, and the accompanying articles and documents include a small number of fairly generic articles on the management of expert evidence.<sup>233</sup> Although this is only the publically available material, and members of the judiciary will remain free to work within the framework identifying areas where development is required, it is not apparent that there is substantial targeted education and training relating to expert evidence readily available via the college.

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<sup>228</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 181

<sup>229</sup> L Heffernan and M Coen 'The Reliability of Expert Evidence: Reflections on the Law Commission's Proposal for Reform' (2009) 73 *Journal of Criminal Law* 488; A Roberts 'Rejecting General Acceptance, Confounding the Gate-Keeper: the Law Commission and Expert Evidence' (2009) 8 *Criminal Law Review* 551

<sup>230</sup> I Dennis 'Tightening the Law on Expert Evidence' (Editorial 2015) 1 *Criminal Law Review* 1

<sup>231</sup> Courts and Tribunals Judiciary How the Judiciary are trained.

<https://www.judiciary.uk/about-the-judiciary/training-support/judiciary-trained/> accessed 22/09/19

<sup>232</sup> Courts and Tribunals Judiciary Judicial Skills and Abilities Framework 2014 – this is the only framework shown on the website relating to the judicial college <https://www.judiciary.uk/wp-content/uploads/2010/05/judicial-skills-and-abilities-framework-2014.pdf> accessed 22/09/19

<sup>233</sup> M Hinchliffe 'Experts in our own little Niches' part one and part two'

[https://www.judiciary.uk/wp-content/uploads/2016/01/hinchliffe\\_role-of-expert-members-pt1-winter2013.pdf](https://www.judiciary.uk/wp-content/uploads/2016/01/hinchliffe_role-of-expert-members-pt1-winter2013.pdf) and [https://www.judiciary.uk/wp-content/uploads/2016/01/hinchliffe\\_role-of-expert-members-pt1-winter2013.pdf](https://www.judiciary.uk/wp-content/uploads/2016/01/hinchliffe_role-of-expert-members-pt1-winter2013.pdf) accessed 22/09/19

#### 4.2.4 The Judiciary as Gatekeepers

The first concerns regarding the gatekeeper role were eloquently expressed by Chief Justice Renquist's dissenting opinion in *Daubert*, in which he argued that this approach would require judges to deal with material far removed from the type of material customarily placed before the court, urging caution with regard to the application of Rule 702 and noting the concern that 'our reach can so easily exceed our grasp'.<sup>234</sup> The Chief Justice further noted that while Rule 702:

...confides to the judge some gatekeeping responsibility ... I do not think it imposes on them either the obligation or the authority to become amateur scientists in order to perform that role.<sup>235</sup>

The issue of the competence of judges to assume this role must be considered. Although judges are by reason of both education and training intellectually able, they are not and can never be experts on every topic that may come before them. This is highlighted in the English civil case of *XYZ v Schering Healthcare Ltd*<sup>236</sup> wherein the judge said of some particularly complex statistical evidence:

I concluded I did not understand the evidence...

While noting and acknowledging the concerns regarding the *Daubert* style gatekeeping role, it is important to note that even before the modifications to the CrimPR judges have been taking on the role of 'gatekeeper' with some success. If one considers *R v Henderson*<sup>237</sup> the court stressed the requirement for effective pre-trial marshaling and preparation, with the court having access to a core literature file to enable them to weigh the literature upon which controversial evidence was based. Moses LJ, delivering the judgment of the court, noted:

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<sup>234</sup> *Daubert v Merrell Dow Pharmaceuticals Inc* 509 US 579 (1993) – CJ Renquist dissenting opinion at 599

<sup>235</sup> *ibid* 601

<sup>236</sup> *XYZ v Schering Healthcare Ltd* [2002] EWHC 1420(QB) [149]

<sup>237</sup> *R v Henderson* [2010] EWCA Crim 1269

... we must emphasise the importance of the pre-trial process. First, we suggest that the judge who is to hear a particular case should deal with all pre-trial hearings, save for those in which no issue of substance is to be considered. Second, it is desirable that any judge hearing cases such as these, which depend entirely on expert evidence, should have experience of the complex issues and understanding of the medical learning. This is easy enough to achieve in the Family Division, more difficult in a criminal jurisdiction.<sup>238</sup>

Although the reception of the Law Commission proposals was broadly positive, concerns were raised by both the Forensic Science Service and the British Psychological Society, who 'doubted whether it would be practicable for judges to acquire sufficient knowledge to make informed rulings on the reliability of expert opinion evidence'.<sup>239</sup> Concerns were also expressed by the UK Accreditation Service<sup>240</sup> who, while supporting the proposals, argued that judges should take account of 'the increased confidence that can be derived from the fact that an expert works within the context of an accredited organisation'.<sup>241</sup> It is of course arguable that such an objection says as much about supporting a business model as it does about the reliability of the expert evidence.

In the US, the NAS recommended that Congress should establish an independent National Institute for Forensic Science to establish standards for mandatory accreditation of forensic science laboratories and also the mandatory certification of

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<sup>238</sup> *ibid* [204]

<sup>239</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 3.2

<sup>240</sup> 'The United Kingdom Accreditation Service (UKAS) is the sole national accreditation body for the United Kingdom. UKAS is recognised by government, to assess against internationally agreed standards, organisations that provide certification, testing, inspection, and calibration services. Accreditation by UKAS demonstrates the competence, impartiality and performance capability of these evaluators. In short, UKAS 'checks the checkers'... UKAS accreditation provides an assurance of the competence, impartiality and integrity of conformity assessment bodies.' <https://www.ukas.com/about/our-role/> accessed 29/04/19

<sup>241</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 3.19

forensic scientists. This was taken forward with the establishment of the National Commission on Forensic Science. However, this Obama-era initiative has since been suspended,<sup>242</sup> resulting in academic concern as to the future of forensic reform in the US.<sup>243</sup>

A similar route was recommended in Canada following the recommendations of the Goudge Report.<sup>244</sup> The Goudge Commission investigated concerns over miscarriages of justice related to the reliability of forensic pathology findings in child death cases in Canada. As with the NAS report, the recommendations focused on education, training, standardisation, and certification of practice. In a sense, both the NAS and the Goudge Report looked at 'front loading' the system, in effect building in reliability, such that when evidence reached the courts there could be greater assurance that it was reliable.

It is arguable that the closure of the UK Forensic Science Service in 2012<sup>245</sup> and the consequent outsourcing of work to non-accredited laboratories runs contrary to the recommendations for increasing standardisation and accreditation in the US and Canada. The UK Forensic Science regulator, in her 2018 report,<sup>246</sup> highlighted concerns with the state of forensic sciences in the UK, noting that some forensic science providers are electing not to move towards accreditation, further noting the adverse

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<sup>242</sup> S Hsu 'Sessions orders Justice Dept. to end forensic science commission, suspend review policy' *The Washington Post* (April 10, 2017) [https://www.washingtonpost.com/local/public-safety/sessions-orders-justice-dept-to-end-forensic-science-commission-suspend-review-policy/2017/04/10/2dada0ca-1c96-11e7-9887-1a5314b56a08\\_story.html?noredirect=on](https://www.washingtonpost.com/local/public-safety/sessions-orders-justice-dept-to-end-forensic-science-commission-suspend-review-policy/2017/04/10/2dada0ca-1c96-11e7-9887-1a5314b56a08_story.html?noredirect=on) accessed 31/08/19

<sup>243</sup> SA Cole 'Who Will Regulate American Forensic Science' (2018) 48 *Seton Hall Law Review* 563

<sup>244</sup> *Inquiry into Pediatric Forensic Pathology in Ontario* report Chaired by The Honourable S T Goudge (2008) Report is a systematic review and assessment of paediatric forensic pathology from 1981-2001.

<sup>245</sup> House of Commons Science and Technology Committee: *The Forensic Science Service* Seventh Report of Session (2010-11) The Committee were highly critical of both the prior management and the decision to close the FSS. 208-245

<sup>246</sup> G Tully *Forensic Science Regulator Annual Report Nov 2016-Nov 2017* published 19/01/18

impact of the malpractice identified at Radox Testing Services,<sup>247</sup> which has already led to a number of appeals<sup>248</sup> (not all successful), and it seems likely more will follow.

While the Law Commission did not perceive the issue of education as being excessively concerning or onerous, research undertaken by the Northumbria Centre for Evidence and Criminal Justice Studies (NCECJS) would seem to indicate a potentially alarming lacunae in legal knowledge.<sup>249</sup> In a study undertaken a year after the introduction of the changes to the CrimPR, the NCECJS undertook a national survey of criminal barristers. More than half of respondents indicated that they had dealt with 10 or more cases involving expert opinion evidence since the changes. Thirty per cent of the respondents lacked knowledge of the rules or the practice direction and, of the 70% that were aware of the changes, three-quarters said they had little or no effect on how the evidence was dealt with. As noted by Davies and Piasecki, 'at the most basic level, the Rules and Practice Direction can have no effect if practitioners are unaware of them'.<sup>250</sup> They go on to note training which was at the time being developed by the Inns of Court College of Advocacy (ICCA) and also the primers, discussed below, which have been launched.

The primers produced jointly by The Royal Society and Royal Society of Edinburgh in conjunction with the Judicial College, the Judicial Institute, and the Judicial Studies Board for Northern Ireland will cover topics as diverse as DNA profiling, statistics, gait analysis and non-accidental injury (NAI). Hughes LJ said of the primers:

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<sup>247</sup> L Dearden 'Convictions in Doubt as more than 10,000 cases could be affected by data manipulation at forensics lab' *The Independent* (21 Nov 2017) <http://www.independent.co.uk/news/uk/crime/forensic-labs-data-manipulation-criminal-convictions-doubt-radox-testing-services-investigation-a8066966.html> accessed 05/03/18 Radox testing services allegations were made of data tampering at the forensic lab which analysed samples in criminal investigations for 42 UK police forces

<sup>248</sup> *R v Ward* [2018] EWCA Crim 872; *R v Bravender* [2018] EWCA Crim 723; *R v Senior* [2018] EWCA Crim 837

<sup>249</sup> G Davies and E Piasecki 'No more Laissez Faire? Expert Evidence, Rule Changes and Reliability: Can More Effective Training for the Bar and Judiciary Prevent Miscarriages of Justice?' (2016) 80 *Journal of Criminal Law* 327

<sup>250</sup> *ibid* 333

I would like to hope that on some occasions the primer has equipped the judge to see better whether the argument that is being advanced on both sides has a proper basis in science or not.<sup>251</sup>

The first two primers launched addressed the issues of forensic DNA analysis<sup>252</sup> and forensic gait analysis.<sup>253</sup> It should be noted that while the forensic DNA analysis primer relates to an established and widely used form of evidence, the forensic gait analysis primer considering a less mature form of science advises that ‘the scientific evidence supporting forensic gait analysis, as currently practised, is ... extremely limited.’<sup>254</sup>

The launch of such aids for the courts may be seen as either illustrating a determination on the part of the courts to more fully grasp and address the difficulties of expert evidence, or more cynically as a ‘quick fix’ which negates the need for the court to fully engage with the difficulties. However, it should be noted that this approach seems in some respects to follow that adopted seven years previously in *Henderson*, and as such appears to be a serious attempt to engage the issue.

It should be noted that while these primers will presumably present the best available evidence at that point in time, for evidence which may come before the courts of new or cutting edge developments this could well be outside the material covered. There may also be a theoretical risk that courts may be reluctant to admit evidence which falls outside that covered by the primers. It may be that an analogous situation could be the situation with Dr Squier and the two competing theories around the triad of injuries in NAHI which is discussed in 4.2.7.3.

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<sup>251</sup> P Ghosh ‘UK judges to get scientific guides’ *BBC News* (22/11/17) [www.bbc.co.uk/news/science-environment-42057009](http://www.bbc.co.uk/news/science-environment-42057009) accessed 1/12/17

<sup>252</sup> The Royal Society & Royal Society Edinburgh (2017) *Forensic DNA analysis: A primer for courts*

<sup>253</sup> The Royal Society & Royal Society Edinburgh (2017) *Forensic gait analysis: A primer for courts*

<sup>254</sup> *ibid* 6



It is worth noting that academic consideration of how more marginal sciences may be considered for use in the courts has long been a feature of legal publishing;<sup>255</sup> will such papers perhaps be considered alongside these Royal Society documents as some more marginal technologies move into the mainstream?

#### **4.2.5 Court-appointed Experts**

Clause 9(2) of the draft bill allows the court to appoint another expert if they believe it would be in the interests of justice to do so, and was one of the elements not introduced within the rules. English judges already have a very limited ability to call expert witnesses in criminal cases,<sup>256</sup> but the proposal by the Law Commission was that they should be given the power to appoint an independent expert in 'exceptional' cases where this may assist the court as to the issue of reliability.

The expert would have been selected by a selection panel established by the Lord Chancellor.<sup>257</sup> While the principle of an externally selected independent expert is instinctively appealing, a concern would have to exist around the timeliness of such appointments. Although it may be possible to build a panel of known experts on widely known issues/areas of expertise, it may be doubtful whether an independent expert could be found and selected for cutting edge opinions. Aside from the time and expense such a procedure would entail, the issue as ever would be whether an independent expert would be any more likely to be 'right' than the experts approached by the parties, given that they also have an overriding duty to the court rather than to the side retaining their services.

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<sup>255</sup> e.g. AS Balmer and R Sandland 'Making Monsters: The Polygraph, the Plethysmograph, and Other Practices for the Performance of Abnormal Sexuality'(2012) 39 *Journal of Law and Society* 593

<sup>256</sup> Crim PR 19.7(2) allows the Court to appoint a single joint expert if co-defendants who wish to introduce expert evidence at trial cannot agree who the expert should be. In civil cases under the CPR the court has the power under s35.7 (1). Where two or more parties wish to submit expert evidence on a particular issue, the court may direct that the evidence on that issue is to be given by a single joint expert. (2) Where the parties who wish to submit the evidence ('the relevant parties') cannot agree who should be the single joint expert, the court may –

(a) select the expert from a list prepared or identified by the relevant parties; or  
(b) direct that the expert be selected in such other manner as the court may direct.

<sup>257</sup> Draft Bill 9(3)(a)

A concern which may then logically arise is around the selection of the experts who choose the panel, and what expertise would be required. It may be that a learned organisation such as the Royal Society could be approached to assist, noting that they have already worked with the Supreme Court on the expert evidence primers (4.2.4). The question also remains as to who will advise the courts when the expert opinion is truly on the cutting edge, or relates to a highly specialised area where perhaps there are only one or two 'experts'? These are however moot points given that this option was not taken forward.

An alternative, although not entirely dissimilar, idea was proposed by Hartshorne and Miola<sup>258</sup> who expressed support for the introduction of the proposed statutory gate-keeping test, and put forward the case that in respect of new theories this function should be undertaken by a new gate-keeping panel consisting of three Lords Justices of Appeal.

Their argument is that such a panel could be selected on the basis of both their professional and judicial background, and then if required be given additional training in regards to methodology and other relevant techniques. Hartshorne and Miola argue that such an approach to new theories would ensure greater consistency in the application of the statutory test. New or novel theories would be considered by this panel before being presented at trial, and because of the binding nature of a decision by the Court of Appeal clarifying the issues of admissibility for the lower courts, while not inappropriately excluding new or novel theories.

#### **4.2.6 Reliability: Reconsideration on Appeal**

Before considering the recommendation with LC325, it is perhaps helpful to first consider how the Court of Appeal currently approaches claims of fresh evidence as grounds for appeal, as it will be argued such an approach could usefully have informed the approach had this recommendation been taken forward.

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<sup>258</sup> J Hartshorne and J Miola 'Expert Evidence: Difficulties and Solutions in Prosecutions for Infant Harm (2010) 30 *Legal Studies* 279

Guidance as to whether or not an appeal based on fresh evidence will be permitted is given under s.23(1) (c) of the Criminal Appeal Act 1968, which states that the court has a general discretion to admit evidence if the court thinks 'it is necessary or expedient in the interests of justice' so to do. In deciding how to exercise this discretion, the court has to comply with s.23(2). That provides:

(2) The Court of Appeal shall, in considering whether to receive any evidence, have regard in particular to —

- (a) whether the evidence appears to the Court to be capable of belief;
- (b) whether it appears to the Court that the evidence may afford any ground for allowing the appeal;
- (c) whether the evidence would have been admissible in the proceedings from which the appeal lies on an issue which is the subject of the appeal; and
- (d) whether there is a reasonable explanation for the failure to adduce the evidence in those proceedings.

The situation with regard to fresh medical evidence was considered in some detail by the Court of Appeal in *R v Pinfold*<sup>259</sup> wherein the CCRC had referred the convictions for murder to the Court of Appeal on 'the ground that there was a real possibility that the convictions would not be upheld.'<sup>260</sup>

The notion of 'real possibility' is given statutory definition under s13 of the Criminal Appeal Act 1995, noting the conditions under which the CCRC can make a referral to the Court of Appeal:

- (1)(a) the Commission consider that there is a real possibility that the conviction, verdict, finding or sentence would not be upheld were the reference to be made,

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<sup>259</sup> *R v Pinfold* [2003] EWCA Crim 3643

<sup>260</sup> *ibid* [H4]

(b) the Commission so consider—

(i) in the case of a conviction, verdict or finding, because of an argument, or evidence, not raised in the proceedings which led to it or on any appeal or application for leave to appeal against it

The ‘real possibility’ test was subsequently addressed by Lord Bingham CJ in *R v CCRC ex parte Pearson*<sup>261</sup> where his Lordship stated that:

‘The “real possibility” test prescribed in section 13(1)(a) of the 1995 Act as the threshold which the Commission must judge to be crossed before a conviction may be referred to the Court of Appeal is imprecise but plainly denotes a contingency which, in the Commission’s judgment, is more than an outside chance or a bare possibility but which may be less than a probability or a likelihood or a racing certainty. The Commission must judge that there is at least a reasonable prospect of a conviction, if referred, not being upheld.’<sup>262</sup>

Thus in *Pinfold* the CCRC deemed that the new medical evidence relating to the credibility of the key witness gave rise to a real possibility of the conviction being unsafe. This proved to be the case with the convictions being quashed.

Referring to LC325, the recommendation was that, on appeal:

... the judge’s ruling on the evidentiary reliability test, in relation to matters which are not case-specific, *should be approached by the appellate court as the application of a rule, a legal judgment, rather than the exercise of a judicial discretion [author italics]*. This would allow the appellate court itself to investigate underlying scientific propositions and properly police the application of the reliability test, so the court would not simply decide whether the judge had acted

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<sup>261</sup> *R v CCRC ex parte Pearson* [2000] 1 Cr App R 141

<sup>262</sup> *ibid* at 150

within the parameters of what any reasonable judge could have done.<sup>263</sup>

The question that the appellate court will have to address is whether or not the evidence was sufficiently reliable to have been admitted. In the event the appellate court finding is at variance with the court of first instance, then the explanatory notes state ‘the court will act accordingly to rectify the error’.<sup>264</sup>

If one considers the previously noted ‘real possibility’ test, it may be that this would have been an appropriate threshold to apply to enable the Court of Appeal to rectify the error, without running the risks of re-examining elements of expert testimony which were perhaps of marginal relevance or where errors were unlikely to have any effect on the safety of the conviction.

The notion is that the decision to review submitted opinion evidence should be a matter of legal judgment rather than an exercise in judicial discretion. The rationale given in LC325 for this amendment is that it will allow the Court of Appeal to properly police how the reliability test has been applied in the trial of first instance, ensuring that admissibility has not been on the basis of the broad discretion afforded by *Wednesbury* principles, but rather that it is correct. The Law Commission expresses the view that this will encourage a more critical approach to expert evidence at first instance.<sup>265</sup> Such a proposition arguably rests on an assumption that ‘fear’ of oversight on appeal will make judges apply the law more rigorously. This point will be revisited in the conclusion.

Edmond<sup>266</sup> notes this was one of the innovative recommendations within the report and speculates that the advantages of being able to observe demeanour would be less

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<sup>263</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 5.90

<sup>264</sup> Draft Bill Explanatory notes A.17

<sup>265</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 5.113

<sup>266</sup> G Edmond ‘Is Reliability Sufficient? The Law Commission and Expert Evidence in international and Interdisciplinary Perspective (Part 1)’ (2012) 16 *The International Journal of Evidence and Proof* 30, 39

relevant when it comes to assessing the reliability of expert evidence. It could also be argued that given the concerns expressed over juries responding to the expert rather than their evidence, there could actually be advantages to not being able to see the expert presenting their evidence.

Given the breadth of the discretion already permitted the Court of Appeal to admit evidence if it is in the interests of justice to do so, it can be argued that appellate review already exists, but perhaps the recommendation would have made this more effective and the outcome more predictable.

In light of that thought, it is instructive to consider the case of Sally Clark. Her conviction for murder was quashed by the Court of Appeal only after a second appeal hearing following a referral by the CCRC.<sup>267</sup> Although the conviction was quashed on the basis of failure to disclose exculpatory medical evidence, the Court of Appeal stated that the flawed statistical evidence submitted by Roy Meadow would also have been a ground for appeal. LC325 notes of the statistical evidence:

With regard to the reliability of the statistical evidence – insofar as the expert paediatrician was competent to provide it and would have wished to proffer it for admission (given the existence of the statutory test), and assuming that the figure would have been disclosed before the trial in his written report – the defence or court would presumably have raised the matter as a preliminary issue in the pre-trial proceedings and the judge would no doubt have directed that the parties and their experts attend a pre-trial hearing to assess the reliability of the figure of one in 73 million.<sup>268</sup>

Had appellate review been in effect at the point of the first appeal hearing, it seems likely that such a fundamental statistical error would have been identified. Although it would, of course, be hoped that had the revised CrimPR/statutory reliability test been

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<sup>267</sup> *R v Clark (Sally)(No 2)*[2003] EWCA Crim 1020

<sup>268</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 8.16

in effect at the time that this error would have been detected by the trial of first instance. It is, however, worth noting that common law provision in effect at the time of the original trial should have not have permitted the witness to give testimony outside his area of expertise, and the statistical error made was so fundamental it is still difficult to understand how it was not picked up by the defence at the time.

#### **4.2.7 Impartiality and Expert Bias**

It is in respect of impartiality and expert bias that the notion of internal or individual factors affecting expert evidence perhaps sees the most obvious manifestation.

The Law Commission in LC325 regarded the current common law test of impartiality as fundamentally sound, while noting the lack of criminal authorities in regard of this.<sup>269</sup> Stockdale and Jackson<sup>270</sup> argue that there are, in fact, no reported criminal cases supporting the notion that impartiality forms one of the limbs of the common law admissibility test. The position with regard to criminal proceedings is set out in *R v Stubbs*, wherein Richards LJ stated:

[e]xpertise and independence are separate issues [it being] a matter for the jury to determine whether there [is] any conscious or unconscious bias or lack of objectivity that might render [an expert's] evidence unreliable [this being] a matter going to weight rather than admissibility.<sup>271</sup>

While the need for impartiality is (arguably) not part of the current common law admissibility test, it is contained within the current CrimPR wherein the duty of the expert to give 'objective and unbiased'<sup>272</sup> evidence is clearly stated.

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<sup>269</sup> *ibid* 3.126 and 4.7

<sup>270</sup> M Stockdale and A Jackson 'Expert Evidence in Criminal Proceedings: Current Challenges and Opportunities' (2016) 80 *Journal of Criminal Law* 344

<sup>271</sup> *R v Stubbs* [2006] EWCA Crim 2312 [59]

<sup>272</sup> CrimPR 19.2(1)(a),(2)

Although the need for expert evidence to be objective and unbiased is clearly stated, the ability of the courts to exclude expert testimony where bias is a concern is arguably somewhat restricted. Stockdale and Jackson argue that there are two potential routes to exclude expert evidence as a consequence of bias on the part of the expert. The first of these is under s 78 of PACE<sup>273</sup>, although not concerning impartiality or bias, in *Dlugosz* the court determined that if ‘...a jury might attach false or misleading significance to it [expert evidence]’<sup>274</sup> then although otherwise admissible the court should decline to admit the evidence under s78, but it should be noted this would only apply to expert evidence on the part of the prosecution.

The other possible route highlighted is to assert that the bias is such that the scientific basis for the material is insufficiently reliable for it to be admissible under that limb of the common law test. This solution would have the advantage that it could apply equally to evidence tendered by the prosecution or the defence.

Although argument can be made for these possible solutions to biased expert evidence, Stockdale and Jackson note that, currently, the main option where counsel have concern as to potential bias is an appropriate and challenging cross examination strategy. However, as noted in the previous chapter, there is not universal acceptance that this is always an effective strategy.<sup>275</sup>

While the CrimPR contain the clear requirement for impartiality at r19.2, it is argued that this is not as simple as it may appear. There is a substantial body of literature which sets out a number of areas of potential bias on the part of the expert. Dwyer has written extensively on the subject, although largely in relation to civil cases. It is argued that much of the argument Dwyer makes is equally as applicable in the criminal courts.

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<sup>273</sup> Police and Criminal Evidence Act (1984), s78

<sup>274</sup> *R v Dlugosz* [2013] EWCA Crim 2 [27]

<sup>275</sup> See fn204



Dwyer<sup>276</sup> addresses identifies three causes of expert bias, these are:

- Personal interest
- Financial interest
- Intellectual interest

Du<sup>277</sup> classifies expert witness bias into four categories:

- Cognitive bias
- Bias in the analytic process
- Bias resulting from the position of the expert at trial
- Social bias arising from social or economic pressure

Du's work considers control of bias in terms of the Chinese legal system. As such, there is perhaps limited applicability to this work, beyond noting that the categories themselves – even on cursory examination – show considerable commonality with those identified by Dwyer.

#### **4.2.7.1 Personal Interest**

Dwyer further divides this into bias which can arise from an individual's personal predisposition, and bias which can arise from an individual's involvement with the case. If this is considered in light of individual or internal inaccuracies affecting expert evidence it would seem that personal predisposition is clearly an individual issue, whereas involvement with the case would fall within a system issue.

**Personal Predisposition** – this relates to the individual's moral opinions and personal relationships. One example is that of the civil case *Liverpool RC Archdiocese (No3)*<sup>278</sup> wherein the expert was a long-time friend and colleague of the defendant. Evans-

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<sup>276</sup> D Dwyer 'The Causes and Manifestations of Bias in Civil Expert Evidence' (2007) 26 *Civil Justice Quarterly* 425

<sup>277</sup> M Du 'Legal Control of Expert Witness Bias' (2017) 21 *International Journal of Evidence and Proof* 69

<sup>278</sup> *Liverpool Roman Catholic Archdiocesan Trust v Goldberg (No.3)* [2001] 1 WLR 2337

Lombe J ruled the expert evidence was inadmissible on the public policy ground that 'justice must be seen to be done as well as done'.<sup>279</sup> He noted:

...where it is demonstrated that there exists a relationship between the proposed expert and the party calling him which a reasonable observer might think was capable of affecting the views of the expert so as to make them unduly favourable to that party, his evidence should not be admitted however unbiased the conclusions of the expert might probably be.<sup>280</sup>

The reasoning in this judgment was however rejected by the Court of Appeal in *R(on the application of Factortame Ltd) v Transport Secretary (No 8)*,<sup>281</sup> on the grounds that such a test would 'inevitably exclude any employee from giving evidence on behalf of an employer.'<sup>282</sup> This is of particular relevance when one considers that, until recently, agencies such as the Forensic Science Service were government-owned agencies.

It is also arguable that individuals working for agencies such as the Forensic Science Service may perceive themselves to be aligned with 'the forces of law and order' leading on occasion to possible unconscious (or in some cases conscious) bias in favour of the state's case. This is illustrated by the notorious miscarriages of justice concerning the Birmingham Six.<sup>283</sup> Following the quashing of the convictions, it was alleged in a House of Commons debate that the forensic scientist whose evidence helped secure the convictions 'conspired with police officers to pervert the course of justice'.<sup>284</sup> There does not appear to have been any further investigation or prosecutions emanating from that allegation which would have been subject to Parliamentary privilege.

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<sup>279</sup> *ibid* [12]

<sup>280</sup> *ibid* [13]

<sup>281</sup> *R(on the application of Factortame Ltd) v Transport Secretary (No 8)* QB 381

<sup>282</sup> *ibid* [70]

<sup>283</sup> J Robins 'Nightmare on Disclosure Street' 168 *New Law Journal* 7785, 22

<sup>284</sup> HC Deb 16 February 1988, vol 127, col 950 it should be noted that the Minister of State for the Home Office refuted the allegations during the same debate vol 127, cols 954- 957

**Involvement with the case** – such involvement is illustrated by the case *Vernon v Bosley*<sup>285</sup> (which Dwyer identifies as an example of conscious bias). In this case, the plaintiff took action for damages for psychiatric injury following the death of two of her children in an accident. Expert opinion for the plaintiff in the damages action indicated marked psychiatric injury had occurred and substantial damages were awarded. Shortly thereafter, the privileged document was disclosed in error, thereafter the same reports were used in an action in the family court regarding custody of the remaining children, and the expert reports indicated a far more positive outcome.

In his judgement Thorpe LJ commented:

The danger that an expert witness who has a well-established patient relationship with the plaintiff might develop there from a sympathy for or identification with the plaintiff that jeopardised objectivity.<sup>286</sup>

Noting that concern, the current CrimPR r19.2 stipulates that the expert's opinion must be 'objective and unbiased', thus the need for impartiality is clearly articulated.

#### **4.2.7.2 Financial Interest**

Once again this category is further divided, Dwyer identifies that financial interest can arise from either pre-disposition or involvement.

This may arise if, for example, the expert was a shareholder in one of the instructing parties, possibly an employee of one of the parties or potentially looking towards a career as an expert witness. Noting the last of the three options, Dwyer cites Janasoff:

The legal system's preference for proven winners encourages such repeat witnessing, although it substantially narrows the range of expertise that finds its way into court.<sup>287</sup>

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<sup>285</sup> *Vernon v Bosley (No 2)* [1999] QB 18

<sup>286</sup> *ibid* at 57

It could be argued that ‘hired guns’ are, or were, more a feature of civil cases, but it is argued that if one looks at criminal cases, a limited number of names can be seen repeatedly. If one considers Sir Roy Meadow in the child death cases which dominated the headlines in the late 1990s and early 2000s, this could be seen as a case of a ‘winner’ whose evidence helped secure convictions consistently and who presumably had a solid ‘sideline’ as an expert witness until the *Clark* and *Cannings* miscarriages came to light.

Understandably, the income to be made as an expert witness is not something widely discussed, but a cursory examination of employment websites locates jobs offering £450 a day, and some posts up to £160,000pa.<sup>288</sup> It is arguable that if such substantial earnings can result, that individual is likely to be heavily invested in maintaining a reputation and thus ongoing employment.

Noting the issues that arose in connection with Meadow, it is argued that ‘one bad apple’ does not necessarily mean that the system is beyond repair. The ‘flawed’ experts are the ones that come to public notice, but there are many other experts who presumably comply with the requirements of the CrimPR and contribute to the continuing functions of the courts. Policing of the guidance set out in the CPD should go some way to ensuring that fewer flawed experts present testimony as the courts exert greater control on the quality of the opinion evidence placed before them.

#### **4.2.7.3 Intellectual Interest**

Dwyer notes that intellectual interest is particularly relevant in the adversarial system, in that a potential litigant can identify an expert who will give an opinion favourable to their case, so-called expert shopping.

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<sup>287</sup> S Jasanoff *Science at the Bar: Law, Science and Technology in America* (Cambridge MA Harvard University Press 1995), 46

<sup>288</sup> Indeed recruitment website. Search term ‘Expert witness’  
<https://www.indeed.co.uk/jobs?q=Expert%20Witness&start=10&vjk=14b45672b3d6a3af>  
accessed 15/07/18

Redmayne<sup>289</sup> relates expert bias in terms of a 'bell curve' effect. If a group of experts were to be asked their opinion on a specific point within their expertise there would be a range of opinions, with the majority of opinions clustered around a particular point and with fewer opinions on the periphery, thus potentially giving a distribution shaped much like a bell curve. The adversarial system allows litigants to select their expert, thus the potential difficulty of 'expert shopping' whereby the individual finds an expert with a view which best supports their position.

Redmayne notes this as meaning potentially each party finds the experts best supporting their position, thus in its most extreme form this could mean the expert evidence presented is from the extreme ends of the curve, and possibly not part of mainstream opinion. If one relates this to criminal cases, arguably the Crown is less likely to be adducing extreme or 'fringe' theories, but as the defence has only to introduce an element of doubt, it is possible that, provided the test of admissibility is met, evidence could be bought forward which sits on the edge of the curve. It is important to remember, however that whether a theory sits in the mainstream or on the fringes this is no guarantee that it is actually correct.

The position of the courts with respect to 'expert shopping' was made clear in *Beck v Ministry of Defence*<sup>290</sup> wherein Ward LJ noted 'expert shopping is to be discouraged',<sup>291</sup> this authority being reinforced in *Hajigeorgiou v Vasiliou*,<sup>292</sup> wherein Dyson LJ noted:

The principle established in Beck is important. It is an example of the way in which the court will control the conduct of litigation in general and the giving of expert evidence in particular. Expert shopping is undesirable and, wherever possible, the court will use its powers to prevent it<sup>293</sup>

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<sup>289</sup> M Redmayne *Expert Evidence and Criminal Justice* (Oxford University Press 2001) 201

<sup>290</sup> *Beck v Ministry of Defence* [2003] EWCA Civ 1043; [2005] 1 WLR 2206

<sup>291</sup> *ibid* [30]

<sup>292</sup> *Hajigeorgiou v Vasiliou* [2005] EWCA Civ 236

<sup>293</sup> *ibid* at 427

In criminal cases it is likely that expert shopping would be a feature of the defence rather than the Crown. A defendant not reliant on Legal Aid, and with access to independent means may seek to adduce expert evidence in their defence which would not usually be accessible, in effect 'expert shopping'. Providing the expert and the expert evidence meet the requirements of the CrimPR and practice directions, and with respect to both reliability and impartiality there is little the courts could do to prevent it.

The previously noted case of Sally Clark is a prime example of an expert witness with intellectual interest in a particular field of enquiry where a miscarriage of justice resulted. Sir Roy Meadow, the expert for the Crown, gave medical evidence concerning the relevance of genetic and environmental factors in sudden unexpected death in infancy (SUDI); the statistical evidence was as to the likelihood of the two deaths being because of natural causes. At that time Sir Roy Meadow's view that 'one sudden infant death is a tragedy, two is suspicious and three is murder until proved otherwise'<sup>294</sup> was sufficiently well established to be known as 'Meadow's Law.'<sup>295</sup>

A possible manifestation of intellectual interest is the tendency to become wedded to a particular position or theory, the so-called 'overly dogmatic' expert, of which Roy Meadow was arguably one. The need to avoid being overly dogmatic was noted by Judge LJ in respect of the causes of SUDI syndrome, noting of competing theories:

We cannot avoid the thought that some of the honest views expressed with reasonable confidence in the present case (on both sides of the argument) will have to be revised in years to come, when the fruits of

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<sup>294</sup> R Meadow *ABC of Child Abuse* (British Medical Journal London 1989)

<sup>295</sup> R Meadow (editor) *ABC of Child Abuse* (third edition BMJ Publishing Group 1997). This book was a standard reference guide for health care and social workers running to 4 editions all edited by Roy Meadow. In the chapter on 'Fatal Abuse and Smothering' Meadow concludes: 'there is now substantial experience of mothers who repetitively smother consecutive children,... 'One sudden infant death is a tragedy, two is suspicious and three is murder until proved otherwise' is a crude aphorism but a sensible working rule for anyone encountering these tragedies', 29

continuing medical research,...,become available. Until then, any tendency to dogmatise should be met with answering challenge <sup>296</sup>

Noting this warning against dogmatism, which manifests as bias, it is perhaps salutary to review the circumstances surrounding *R v Harris*.<sup>297</sup> A mother was found guilty of murdering her child. Expert evidence played a key role in the case, specifically in respect of the so-called ‘triad of injuries,’ the triad consists of:

- Encephalopathy (disease of the brain affecting function of the brain)
- Subdural haemorrhages (bleeding into the space between the membranes around the brain)
- Retinal haemorrhages (bleeding within the retina)

These features were said, at the time, to be diagnostic of non-accidental head injury (NAHI).<sup>298</sup>

One of the experts for the Crown, Dr Squier, gave expert evidence that the triad was diagnostic. At the appeal five years later,<sup>299</sup> the same expert gave evidence for the appellant, but now expressed the opinion that the triad did not prove the existence of NAHI, but rather that the range of injuries could have natural causes.

Dr Squier explained that research had led her to revise her opinion. The conviction was overturned. This departure from the mainstream theory of the diagnostic triad emerged in 2004.<sup>300</sup> It remains outside the mainstream, with the CPS requiring the

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<sup>296</sup> *R v Cannings* [2004] EWCA Crim 1 [22]

<sup>297</sup> *R v Harris* [2005] EWCA Crim 1980

<sup>298</sup> The triad of injuries is currently listed on the CPS website noting that “despite medical uncertainty surrounding the mechanism, the triad of injuries is a strong medical pointer to the infliction of NAHI” CPS ‘Non Accidental Head Injury Cases (NAHI, formerly referred to as Shaken Baby Syndrome [SBS]) - Prosecution Approach’ (2018) <https://www.cps.gov.uk/legal-guidance/non-accidental-head-injury-cases-nahi-formerly-referred-shaken-baby-syndrome-sbs> accessed 25/09/18

<sup>299</sup> *R v Harris* [2005] EWCA Crim 1980

<sup>300</sup> Between 2000 and 2004 Dr J Geddes produced 3 papers which proposed the ‘unified hypothesis’ which called into question the diagnostic certainty of the NAHI Triad.

triad be supported by additional evidence to take a case forward. The 'unified hypothesis' was rejected by the Court of Appeal in 2010.<sup>301</sup>

Dr Squier was reported to the GMC by the National Policing Improvement Agency, and following a hearing by the Medical Practitioners Tribunal Service (MPTS) was removed from the medical register.

The MPTS decision to strike Dr Squier from the medical register was quashed on appeal,<sup>302</sup> on the basis that while elements of the finding in regard to her behaviour were correct, there were significant flaws in the conduct and finding of the tribunal. The court imposed restrictions on her practice such that she could not act as an expert witness in the criminal or family courts for a period of three years.

Thus it can be argued that the overly dogmatic expert is sanctioned for an 'honestly held' opinion, but the expert who responds to new evidence and performs a *volte-face* may also be penalised.

Commenting on the Squier case, Pamplin<sup>303</sup> notes the risks of publicly confronting dogma, expressing the concern that this case will have a 'chilling effect on the supply of experts willing to stand up in court and confront professional dogma'. Following the determination, a group of some 20 high profile lawyers and medics writing to *The Guardian* expressed the concern that 'it is sad day for science when a 21<sup>st</sup>-century inquisition denies one doctor the freedom to question mainstream beliefs.'<sup>304</sup> Michael Powers QC further noted the risk that others will be reluctant to challenge mainstream opinion.<sup>305</sup>

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<sup>301</sup> *R v Henderson* [2010] EWCA Crim 1269

<sup>302</sup> *Squier v General Medical Council* [2016] EWHC 2739 (Admin)

<sup>303</sup> C Pamplin 'Confronting Dogma' (2017) 167 *New Law Journal* 19

<sup>304</sup> M Mansfield et al 'General Medical Council behaving like modern inquisition' (Letters 21 March 2016) *The Guardian* <https://www.theguardian.com/society/2016/mar/21/gmc-behaving-like-a-modern-inquisition-by-striking-off-dr-waney-squier> accessed 04/08/19

<sup>305</sup> MJ Powers 'Why the shaken baby syndrome tribunal led to Dr Waney Squier being stuck off' *The Guardian* (Letters 22 March 2016)



An interesting aside to note is that claims as to the reliability of the diagnostic accuracy triad continue. A 2017 systematic review of the evidence relating to the triad concluded that 'there was insufficient scientific evidence on which to assess the diagnostic accuracy of the triad in identifying traumatic shaking...It also demonstrated that there is limited scientific evidence that the triad and therefore its components can be associated with traumatic shaking.'<sup>306</sup>

The question which then arises is, given the recognition of these forms of bias, do the revised CrimPR serve to manage these effects such that the jury is aided in its decision making?

It is arguable that the overriding duty to the court, the need for impartiality, and the guidance with regard to stating both supportive and non-supportive evidence for the opinion being expressed will ensure that the evidence placed before the jury should be balanced. But the previously noted concerns regarding the lack of use of the rules could effectively prevent this from occurring. It is also difficult to see how the legal system's preference for 'winners' will be affected, and if one considers the seeming discouragement meted out to experts who challenge existing theory, then the potential decrease in the pool of experts willing to testify may further limit the range of expert opinion placed before the courts.

#### **4.3 Conclusion: A Missed Opportunity or the Most Comprehensive Guidance in the Common Law World?**

Hodgkinson and James, as previously noted, suggested that the English criminal courts, in the revised CrimPR, and specifically in Part 19, have the best guidance in the common law world; however, it is argued that while that may be one view, another

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<https://www.theguardian.com/society/2016/mar/22/why-the-shaken-baby-syndrome-tribunal-led-to-dr-waney-squier-being-struck-off> accessed 25/09/18

<sup>306</sup> N Lynøe, G Elinder, B Hallberg, M Rosén, P Sundgren and A Eriksson 'Insufficient Evidence for 'Shaken Baby syndrome' – a Systematic Review' (2017) 106 *Acta Paediatrica* 1021

equally valid view is that the Law Commission review missed the opportunity to do far more.

The missed opportunity element, it is argued, was the failure to engage with a review that went beyond the issue of reliability and instead considered the other limbs of the *Bonython* test, namely the acceptance of the *Turner* test and the simple restatement of the test of impartiality. The concerns relating to the fitness of the Turner Principle are considered in detail in the Chapter 6.

Returning to the elements that are incorporated from the review, Lord Thomas CJ, commenting on the success of the first 10 years of the criminal procedure rules,<sup>307</sup> cites the incorporation of the Law Commission reforms into the CrimPR without primary legislation as one of the most striking achievements of the Criminal Procedure Rules Committee. However, he goes on to note that ‘the one significant issue that the proper use of the rules and practice direction faces is the failure of practitioners to refer to and use them’.<sup>308</sup> As a comment from the most senior judge in the land, this seems a somewhat damning point; if the rules are not being used, then change will not happen and miscarriages of the type that lead to the review may happen again. The evidence from the NCECJS supports this position, and perhaps links very neatly back to Edmonds’ concern noted earlier that the LC325 does not in itself recognise the need for culture change such that the rules are used and understood. Lord Thomas closes his paper by noting that:

...it is plainly the responsibility of practitioners to put behind them the culture that the applicable procedure set out in the Rules and Practice direction is something that does not matter.<sup>309</sup>

While this appears on the surface something of a trite comment, the difficulty of achieving significant and sustained cultural change is not something to be dismissed

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<sup>307</sup> J Thomas ‘The Criminal Procedure Rules: 10 years On’ (2015) 6 *Criminal Law Review* 395

<sup>308</sup> *ibid* 398

<sup>309</sup> *ibid* 398

lightly. Although outwith this thesis, it needs to be noted that there is copious academic literature to support the notion of how challenging it is to achieve and sustain such cultural change.<sup>310</sup>

The wider lack of engagement with the Crim PR is made clear by Sir Brian Leveson in the 2015 Review of Efficiency in Criminal Proceedings,<sup>311</sup> wherein he noted the (hopefully) extreme comments from a cited study in which a circuit judge said of the CrimPR, 'I've never looked at them; don't even know where they are'. Another judge cited in the review said, 'The detail of the CPR [CrimPR] is a desert to 95% of the Bar and a very large proportion of the judges.'<sup>312</sup> Leveson warns that compliance with the rules is not optional and recommends the Judicial College and Criminal Procedure Rules Committee consider ways to improve both understanding and use of the CrimPR.<sup>313</sup>

It is also worth noting that similar issues with lack of engagement with the *Daubert* standard and its use in the US courts can be inferred from the study noted earlier.<sup>314</sup>

The lack of engagement with the revised rules identified earlier in this chapter arguably goes to the need for cultural change, and is another element that indicates perhaps the greatest weakness in the changes is simply the failure to legislate, and instead to rely on 'active encouragement'. While Hodgkinson and James argue that the current CrimPR ensures that the English courts have the most extensive guidance in the common law world, there must be a concern that it is precisely that, guidance.

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<sup>310</sup> e.g. B Burnes 'Kurt Lewin and the Planned Approach to Change: A Re-Appraisal'(2004) 41 *Journal of Management Studies* 913

<sup>311</sup> B Leveson *Review of Efficiency in Criminal Proceedings* (Courts and Tribunals Judiciary, 2015)

<sup>312</sup> *ibid* at 192

<sup>313</sup> *ibid* at 193

<sup>314</sup> J Groscup, S Penrod, C Studebaker, M Huss and K O'Neil 'The Effects of *Daubert* on the Admissibility of Expert Testimony in State and Federal Criminal Cases' (2002) 8 *Psychology, Public Policy & Law* 339 – considered in 4.2.1

Sir Brian Leveson in *R v H* said of the revised CrimPR that: 'A new and more rigorous approach on the part of advocates and the courts to the handling of expert evidence must be adopted.'<sup>315</sup> This perhaps begs the question what obligation will there be on the judiciary to ensure this happens, what will be the sanction if it does not? It is worth revisiting the issue of appellate review which did not make it into the CrimPR. The Law Commission seemed to have assumed that fear of closer appellate review would improve the courts' treatment of expert evidence; it may be that this is actually the case, and if no other sanctions are available, this is the only pressure that can be exerted?

In LC325 the Law Commission argued that the implementation of their recommendations would not only establish a framework for screening of expert evidence at the admissibility stage, but would also have the effect of raising the standards among experts. They do, however, also caution that even had all the recommendations within that paper been taken forwards it was 'unlikely to provide a panacea',<sup>316</sup> and that further schemes are required to ensure minimum standards for evidence and a more critical approach on the part of some judges with regard to the evidence before them.

Within LC325, the commission re-evaluates the possible outcome of four of the cases which had been identified as miscarriages of justice where expert evidence had been central to the wrongful conviction. In each case the report concludes that it is likely that the miscarriage would have been avoided had their proposed changes, which have subsequently been incorporated into the CrimPR, been in effect at the time of the trial<sup>317</sup>.

The revised CrimPR and associated practice directions have only been in effect for a relatively short period of time and, as such, it is too early to see if miscarriages of the

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<sup>315</sup> *R v H* [2014] EWCA Crim 1555 [44]

<sup>316</sup> Law Commission *Expert Evidence in Criminal Proceedings in England and Wales* (Law Com No 325, 2011), 1.42

<sup>317</sup> *ibid* 8.9-8.30

type identified within the Law Commission paper have ceased. It is, however, of some concern that there is emerging evidence that is of concern regarding the use of the rules by the courts.

In the recent case of *R v Pabon*,<sup>318</sup> the appellant appealed against his conviction for conspiracy to defraud in respect of dishonestly rigging the London Interbank Offered Rate (LIBOR). One of the grounds for the appeal was that one of the expert witnesses testifying on behalf of the Serious Fraud Office (SFO) had strayed outside his area of expertise. It was also noted that the expert, Mr Rowe, had exchanged multiple text messages with other experts during the course of his evidence seeking advice with regard to the very area within which he was giving expert testimony.<sup>319</sup> During cross examination, which the transcript describes as 'damaging'<sup>320</sup> the expert indicated to the trial judge that he had not fully read the information relating to being an expert witness prior to signing the declaration, and indicated an awareness that he was testifying outside his area of expertise.<sup>321</sup>

The conclusion of the Court of Appeal was that Rowe had 'signally failed to comply with his basic duties as an expert'.<sup>322</sup> Fortunately, however, the court was also able to conclude that Rowe's failings were ultimately irrelevant to the key issues in the case, and did not undermine the safety of the appellant's conviction.

Somewhat disturbingly, this does not appear to be a unique case. In May 2019, following the collapse of a carbon credits fraud trial, evidence emerged of an expert, Andrew Ager, who was found not be qualified in the field,<sup>323</sup> leading the judge to state that:

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<sup>318</sup> *R v Pabon* [2018] EWCA Crim 420

<sup>319</sup> *ibid* [44]-[49]

<sup>320</sup> *ibid* [50]

<sup>321</sup> *ibid* [50]-[51]

<sup>322</sup> *ibid* [58]

<sup>323</sup> S Osborne 'Carbon credits fraud trial collapses after expert witness found to have no expertise' *Independent* (20 May 2019)

<https://www.independent.co.uk/news/uk/crime/carbon-credits-fraud-trial-collapses-andrew-ager-expert-witness-a8935921.html> accessed 2/06/19

Andrew Ager is not an expert of suitable calibre. He has little or no understanding of the duties of an expert. He had received no training and attended no courses. He has no academic qualifications. His work has never been peer-reviewed.<sup>324</sup>

He has since been removed from the National Crime Agency's (NCA) list of approved experts, but is noted to have given expert testimony at the instigation of the prosecution in some 20 cases previously, thus raising the potential question as to the safety of any convictions.<sup>325</sup>

Searching both Westlaw and Lexis<sup>326</sup> it has not been possible to locate any cases wherein this expert is named as having given evidence. Given that cases of first instance are rarely reported, it may well be that none of the cases where he gave expert testimony have reached the Court of Appeal. It could be argued that this indicates that the system is still not fit for purpose in that it took a *voir dire* at the instigation of the defence to expose the fact that this expert should never have been giving testimony or been listed by the NCA.

In terms of what these failures indicate about the effectiveness of changes to the CrimPR, in *Pabon* the SFO concluded that the expert's 'conduct resulted from a failure of integrity on his part rather than a failure of SFO policies or procedures'.<sup>327</sup> The need to testify only to matters within one's areas of expertise was present in previous iterations of the CrimPR, and while it is too soon to know what the conclusion will be with regard to Mr Ager, the findings regarding the expert in *Pabon* could be viewed as a wider indication of a failure of the rules. What could also, and perhaps more

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<sup>324</sup> C Coleman 'Carbon Credit fraud trial collapses as expert witness was no expert' *BBC News* (30 May 2019) <https://www.bbc.co.uk/news/uk-48444605> accessed 2/06/19

<sup>325</sup> 2 Hare Court 'Major Carbon Credit & Diamond Trial Collapses After Narita Bahra QC Exposes Fundamental Disclosure failings' (29 May 19) <https://www.2harecourt.com/2019/05/29/narita-bahra-qc-causes-carbon-credits-diamonds-trial-collapse/> accessed 2/06/19

<sup>326</sup> Search terms 'Andrew Ager', 'Ager', 'carbon credits', 'emissions trading', 'expert evidence'

<sup>327</sup> *R v Pabon* [2018] EWCA Crim 420 [76]

forcefully, be argued is that this 'debacle', and its widespread reporting, does nothing to encourage public confidence in expert testimony.<sup>328</sup> In respect of Mr Ager, the failure to either note or disclose the fact that he did not meet even the most basic requirements to be an expert witness makes the term 'debacle' not seem too strong.

Returning to the question asked at the start of this chapter, a case has been made that it is both comprehensive guidance and missed opportunity; the guidance is clear but, until and unless the appropriate education and training occurs resulting in a cultural shift such that all judges and lawyers within the criminal justice process are engaged, the problem is likely to remain.

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<sup>328</sup> A Verity 'A Court raps SFO for use of 'inexpert' expert witness' *BBC News* (24/11/17) [http://www.bbc.co.uk/news/business-42109725?intlink\\_from\\_url=http://www.bbc.co.uk/news/topics/cvenzmgyw42t/banking&link\\_location=live-reporting-story](http://www.bbc.co.uk/news/business-42109725?intlink_from_url=http://www.bbc.co.uk/news/topics/cvenzmgyw42t/banking&link_location=live-reporting-story) accessed 01/12/17; L Burton 'Libor families hit back at SFO with further claims of non-experts' *The Telegraph* (06/01/18) <https://www.telegraph.co.uk/business/2018/01/06/libor-families-hit-back-sfo-claims-non-experts/> accessed 01/12/17

## Chapter 5: The Jury and Expert Evidence – Can the Courts Better Aid the Jury in their Search for the Truth?

### 5.0 Introduction

The majority of criminal cases in England and Wales are disposed of via the magistrates' courts,<sup>329</sup> and in many cases a magistrates' court will clear several cases a day, largely on the basis of guilty pleas. The Crown Courts deal with the more complex and serious cases, which can run over several days or sometimes weeks, as such while the Crown Court jury trial disposes of a fraction of criminal cases, these are the most serious cases.

In 2017 magistrates' courts in England and Wales disposed of 1.5 million cases, 78% of which were summary offences. Over the same period, Crown Courts disposed of 118,600 cases, 38% were for trials for either-way offences, 25% were for trials for indictable offences, 29% were cases appearing for sentencing, and 9% were appeals against decisions in the magistrates' court.<sup>330</sup> Of those cases coming before the Crown Courts, the overall guilty plea rate was 67%.<sup>331</sup>

How the courts evaluate expert evidence or, more specifically, how a jury evaluates such evidence is, it will be argued, simply another facet, or an extension of how they evaluate all the evidence placed before the court. Although magistrates' courts do hear expert evidence, this is generally the less complex end of the spectrum,<sup>332</sup> and importantly it should be noted that the stakes for the defendant are substantially

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<sup>329</sup> More than 90% of all criminal cases are dealt with in magistrates' court. Courts and Tribunals Judiciary 'Magistrates' Courts' <https://www.judiciary.uk/you-and-the-judiciary/going-to-court/magistrates-court/> accessed 12/06/18

<sup>330</sup> G Sturge 'Court statistics for England and Wales Briefing paper CBP 8372' *House of Commons Library* November 2018 at 2.1 – NB the figures given for the Crown Court activity total 101% there is no explanation given for this discrepancy.

<sup>331</sup> Ministry of Justice *Criminal Court Statistics Quarterly, England and Wales, January to March 2018 (Annual 2017)* Published 28 June 2018

<sup>332</sup> This is not always the case. In *R v Bromley Justices Ex p Haymill (Contractors)* [1984] 1 WLUK 1135 a bench of three justices heard a case involving conflicting expert evidence, were unable to resolve the conflict and ordered the case be reheard by a fresh bench. The Divisional Court overturned this and made an order requiring the justices to reach a decision on the evidence already heard.



lower with the maximum term of imprisonment available to the magistrates' court being limited to six months for a single offence, although the possibility of unlimited fines exists.<sup>333</sup> As such, with the majority of complex expert testimony and the higher stakes which come through the crown courts in front of a jury, this will be the focus.

The jury as the finder of fact is a core component within the criminal justice system and in this chapter an examination will be made of how juries make decisions, specifically in relation to the management and understanding of expert evidence.

A range of alternative methods which may, it will be argued, better manage expert evidence will be considered with specific reference to the approach within the Australian courts and the use of concurrent (hot tubbing) and consecutive evidence. Consideration will also be given to other more exotic solutions including the arguably extreme solution of 'no-jury' trials for cases heavily reliant on expert testimony.

## **5.1 The Role of the Jury as Finder of Fact**

### **5.1.1 The Jury System in England and Wales**

In England and Wales, individuals aged between 18 and 76 can be summoned to serve on a jury, while there are some factors which can disqualify an individual from jury service<sup>334</sup> there is no requirement that individuals have any particular skills in analysing complex information. This is arguably a concern given the increasing complexity of evidence being presented in criminal trials.

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<sup>333</sup> GOV.UK Criminal Courts – Magistrates Courts <https://www.gov.uk/courts> Accessed 22/07/19

<sup>334</sup> Reasons for being disqualified from jury service are (a) Being subject to certain sections of the MHA 1983; (b) lacking capacity within the meaning of the Mental Capacity Act 2005; (c) being on bail in criminal proceedings or having been convicted of or imprisoned for certain offences. Courts and Tribunals Service 'Guide to Jury Summons' (2018) <http://formfinder.hmctsformfinder.justice.gov.uk/jury-summons-guide-eng.pdf> accessed 14/04/18

To understand exactly how a jury reaches the decision it does is difficult within this jurisdiction, given the effective bar on jury research.<sup>335</sup> Consequently, much of the research to be considered has its roots in the US, with some recent evidence also emerging from Australia.

In one study in this jurisdiction, Thomas<sup>336</sup> concluded that juries are essentially fair, delivering verdicts that reflect the evidence. However, those cases where juries must be sure of the state of mind of a defendant or complainant appear to have the lowest conviction rates.<sup>337</sup> Although not discussed within the paper, it is arguable that this is because the jury lacks the means to judge the credibility of the defendant. This will be explored in detail in Chapter 7.

The relevance is that expert evidence as to state of mind is often complex, and if one returns to *Turner* may not even be subject to expert evidence. In the event that expert evidence is admissible to aid the jury in its deliberations, the level of complexity can be high, and if juries are not able to understand the judge's directions on Actual Bodily Harm (ABH) and self-defence as per the Thomas study,<sup>338</sup> then how confident can one be that they will understand highly complex medical or psychiatric evidence?

Although not relating to medical evidence, the difficulties that lay juries can have with complex evidence is well illustrated with the courts' ultimately misguided attempts to engage the jury with Bayes' theorem in *R v Adams*.<sup>339</sup> Bayes' theorem is a statistical approach which describes the probability of an event occurring or being true, taking account of the other known related factors and is widely used in a number of fields.<sup>340</sup>

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<sup>335</sup> Contempt of Court Act (1981) s8 makes it a criminal offence (not just a contempt of court) to 'obtain, disclose or solicit any particulars of statements made, opinions expressed, arguments advanced, or votes cast by members of a jury in the course of their deliberations'.

<sup>336</sup> C Thomas *Are Juries Fair?* (Ministry of Justice 2010)

<sup>337</sup> *ibid* 3.2

<sup>338</sup> *ibid* 3.3

<sup>339</sup> *R v Adams(No 2)*[1998] 1 Cr App R 377

<sup>340</sup> In probability theory Bayes' theorem gives a probability of an event occurring or being true (known as the likelihood ratio) based on the weight that is attributed to the various known elements which are inserted in to the formula

It is important at this point to be clear that the use of statistics can have two distinct approaches/roles, one of which is acceptable and one which is not. The use of statistics to generate primary evidence, which is then relayed by the expert to the jury, is admissible, such evidence would include DNA evidence as set out in *R v Doheny*:

When the scientist gives evidence ...He will properly explain to the jury the nature of the match... between the DNA in the crime scene and the DNA in the blood sample taken from the defendant. He will properly, on the basis of empirical statistical data, give the jury the random occurrence ratio ... Provided that he has the necessary data, and the statistical expertise, it may be appropriate for him to say how many people with the matching characteristics are likely to be found in the United Kingdom.<sup>341</sup>

In *Adams* the jury was invited to complete 24 questions, and then apply these figures to a formula to indicate the probability that the accused was the rapist. While Bayes' theorem is a recognised approach to probability in a range of situations, the Court of Appeal expressed 'the gravest reservations about its use in jury trials...'<sup>342</sup> noting:

To introduce Bayes' Theorem, or any similar method, into a criminal trial plunges the jury into inappropriate and unnecessary realms of theory and complexity deflecting them from their proper task.<sup>343</sup>

Perhaps unsurprisingly, academic opinion is less clear-cut on this rejection with Robertson and Vignaux<sup>344</sup> arguing that Bayes' theorem is simply a formalisation of a logical approach to calculating probabilities and, given that the guilty verdict was upheld, casting doubt on the concern that the instruction as to the use of Bayes would cause confusion or distraction.

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<sup>341</sup> *R v Doheny* [1997] 1 Cr App R 369 at 374

<sup>342</sup> *Adams (No2)*[1998] 1 Cr App R 377 at 384

<sup>343</sup> *R v Adams (Denis)*[1996] 2 Cr App R 467 at 482

<sup>344</sup> B Robertson and T Vignaux 'Explaining Evidence Logically' (1998) 148 *New Law Journal* 159

While the rejection of Bayes' theorem being placed before the jury was the issue in these cases, more recently *R v T*<sup>345</sup> seems to have effectively prevented likelihood ratios already calculated by the expert witness being placed before a jury, other than in very restricted circumstances.

In *R v T*, footwear impressions had been recovered from the scene of the crime. An expert from the FSS reached the conclusion that there was a moderate degree of scientific evidence to support the opinion that a trainer worn by the accused had been the source of the footwear impression. In reaching this conclusion, the expert had ascribed likelihood ratios to each of the parameters of sole pattern, size, wear, and damage. However, the database from which these likelihood ratios were derived was determined by the courts to be inadequate. The court, allowing the appeal, stated that the use of mathematical formulae was not appropriate given the current state of data relating to footwear.<sup>346</sup>

The court went on to state that the use of Bayes' theorem and likelihood ratios was expressly prohibited outside the field of DNA and other areas where there is an appropriately firm statistical base.<sup>347</sup> As such, this judgment could be viewed as simply affirming the core test of admissibility, in that there is a 'sufficiently reliable basis' for the evidence. However, this ruling is contested by some academics<sup>348</sup> arguing that the decision in *R v T* was based upon flawed reasoning and misunderstanding, further arguing that such a move limited the jury from hearing potentially useful evidence.

### 5.1.2 Juror Comprehension of Expert Evidence

If one returns to the assertion that miscarriages of justice relating to expert evidence can be broadly seen as relating to either individual inaccuracies within the expert

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<sup>345</sup> *R v T* [2010] EWCA Crim 2439

<sup>346</sup> *ibid* [80]-[87]

<sup>347</sup> *ibid* [90]

<sup>348</sup> GS Morrison 'The Likelihood-Ratio Framework and Forensic Evidence in Court: A Response to *R v T*' (2012) 16 *International Journal of Evidence and Proof* 1; the judgment was sufficiently controversial that the whole journal *Law, Probability and Risk* 11(4) (2012) focussed on the decision.

evidence or failures within the criminal justice system, then of particular relevance to this thesis is the ability of juries to understand expert evidence.

Two particularly useful studies are the 2016 Bond Solon Expert Witness Survey<sup>349</sup> and a substantial piece of work undertaken by Australian academics Freckleton et al.<sup>350</sup> who conducted extensive research in three Australian jurisdictions.

While not undertaken as a piece of academic research, the Bond Solon survey of more than 740 expert witnesses is of interest as it found that of the experts surveyed, 60% indicated they did not believe juries were equipped to understand expert evidence, concluding that:

This could be due to experts not explaining things properly or clearly enough or because the issue is so complex ordinary citizens cannot be expected to understand.<sup>351</sup>

While it could be seen that such a sentiment could sound elitist or dismissive, it is argued that it may simply be a pragmatic recognition that some subjects are so complex that, even with careful and detailed exploration, many 'ordinary citizens' will not be able to fully follow or comprehend some expert testimony. Steps which may be taken to aid comprehension are considered within this chapter.

It is perhaps worth noting at this point that concerns as to the understanding of expert evidence may also extend to the understanding of the judiciary. In this same survey, 66% of respondents indicated that they believed the judges understood complex

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<sup>349</sup> Bond Solon *Annual Expert Witness Survey Report 2016 First Joint Annual Expert Witness Survey in Collaboration with The Times*

<sup>350</sup> I Freckleton, J Goodman-Delahunty, J Horan and B McKimmie *Expert Evidence and Criminal Jury Trials* (Oxford University Press New York, 2016). The research was conducted in the three largest Australian jurisdictions: New South Wales (NSW), Victoria and Queensland. All materials were de-identified to ensure that individual trials could not be identified and also to ensure the anonymity and confidentiality of the participants.

<sup>351</sup> Bond Solon *Annual Expert Witness Survey Report 2016 First Joint Annual Expert Witness Survey in Collaboration with The Times*, 4

technical evidence,<sup>352</sup> clearly the obverse of this is that some 34% either believe judges do not understand the evidence, or have no opinion.

Moving to the Australian study, Freckleton et al. were given access to jurors, judges, barristers, and expert witnesses post-verdict, allowing an analysis of the experience and understanding of expert evidence from multiple viewpoints. The authors analysed written survey responses from 296 jurors and interview responses from a further 111 jurors as to their perception of expert evidence that was presented at 55 trials. The responses from the jurors were compared with 43 interviews from judges, 115 interviews with barristers, and 80 interviews with expert witnesses.<sup>353</sup>

The data was collected from the 55 trials via the three methods noted below:

- (a) surveys to obtain jurors' perceptions of the expert evidence presented to them;
- (b) post-verdict interviews with jurors, trial judges, trial lawyers, and experts about the expert evidence in those trials; and
- (c) wherever possible, trial observations, and reviews of the transcript of proceedings and other visual aids and documentary materials relating to the expert evidence, such as the expert's report.<sup>354</sup>

The authors did note that one of the limitations of the methods utilised was that it is not possible to assess the basic truth of whether the jurors actually understood the expert evidence.<sup>355</sup> Was the expert biased? Was the expert testimony strong or

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<sup>352</sup> *ibid* 6

<sup>353</sup> I Freckleton, J Goodman, J Horan and B McKimmie *Expert Evidence and Criminal Jury Trials* (Oxford University Press New York, 2016) 1.09

<sup>354</sup> *ibid* 1.17

<sup>355</sup> It should be noted that this concern applies to all evidence, and as the jury is not permitted to discuss outside the jury room how the decision was reached there can be no explanation how the verdict was arrived at. For exploration of possible options around the notion of the explained verdict see M Coen and J Doak 'Embedding Explained Verdicts in the English Criminal Trial' (2017) 37 *Legal Studies* 786

weak/simple or complex?<sup>356</sup> Triangulation of data from multiple sources was deemed by the authors to have offset this limitation.

Some of the key findings from this research were that:

- jurors are generally aware of the challenges posed by expert evidence and that extraneous factors play at most a modest role in influencing jurors' consideration of that evidence;<sup>357</sup> and
- that experts generally are aware of the difficulties their evidence can present to jurors' comprehension and attempt to minimise this effect;<sup>358</sup> and
- that judges intervene when they are concerned that expert evidence is being presented in such a way that juror understanding was likely to be impacted.<sup>359</sup>

When assessing an expert's credibility, the participants in the study identified the following six factors as relevant:

1. An arrogant demeanour
2. Defensiveness
3. Use of emotive language
4. Evasiveness
5. Extent of experience
6. The manner of delivery of the evidence<sup>360</sup>

Factors 1 to 4 were all seen as having a negative impact on the jurors' perception of the credibility of that expert witness, the triangulation data noted that in at least a portion of cases the perception of the juror was echoed by both the barristers and the judge.<sup>361</sup>

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<sup>356</sup>I Freckleton, J Goodman-Delahunty, J Horan and B McKimmie *Expert Evidence and Criminal Jury Trials* (Oxford University Press New York, 2016) 9.81

<sup>357</sup> *ibid* 9.07

<sup>358</sup> *ibid* 5.47-5.53

<sup>359</sup> *ibid* 5.72

<sup>360</sup> *ibid* 8.33

<sup>361</sup> *ibid* 8.34- 8.42

Factor 5 indicated, perhaps unsurprisingly, that expert witnesses who lacked court experience performed less well and were perceived as less effective, in some cases being perceived as defensive or biased.<sup>362</sup>

The final factor concerns basic elements around speed and method of delivery, and use of jargon etc.<sup>363</sup> Even without this research, it is of little surprise that the rapid delivery of complex information, replete with jargon would challenge members of a jury.

Certain extra-legal influences did have a degree of impact on juror assessment of the credibility of expert evidence; these included factors such as demeanour, gender, and the credentials of the expert. When the expert was male, the case was seen as being stronger, and the more well qualified the prosecution expert, the greater the belief of jurors that the prosecution had a strong case.<sup>364</sup>

Freckleton et al. concluded that most jurors were capable of understanding complex expert evidence as long as the courts support them in doing this.<sup>365</sup> They make recommendations for ways in which jurors could be supported in their comprehension. These include the use of consecutive evidence and greater use of concurrent evidence, both elements which will be addressed later in the chapter

The issue of how to aid juries in understanding complex expert evidence has been raised in a number of papers. If one looks back to Zander's 1993 study of 7,000 jurors,<sup>366</sup> almost all felt they understood the judge's directions, but this did not actually assess the extent to which the jurors did actually understand the directions. Although it did not examine comprehension of expert evidence, the issue of juror

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<sup>362</sup> *ibid* 8.43-8.45

<sup>363</sup> *ibid* 8.46-8.47

<sup>364</sup> *ibid* 5.64

<sup>365</sup> *ibid* 9.07

<sup>366</sup> M Zander and P Henderson *Crown Court Study. Royal Commission on Criminal Justice Research Study No 19* (London HMSO 1993)



comprehension of legal instruction was addressed in the previously noted Thomas study which found that:

Most jurors believed they understood the judge's directions on the law. However, a substantial proportion of those jurors in fact did not fully understand the directions in legal terms used by the judge. A written summary of legal directions improved juror comprehension of the law... Such understanding is crucial to ensure that miscarriages of justice do not occur as a result of jury misunderstanding of legal instructions.<sup>367</sup>

Stone<sup>368</sup> argues that the changes to the criminal practice directions (CPD) made following the recommendations of Sir Brian Leveson's Review of Efficiency in Criminal Proceedings<sup>369</sup> addresses these concerns. Perhaps the most relevant for this thesis are the elements dealing with the requirement to set out a written route to verdict, addressing both the elements of law, but also allowing a specific focus in the event of specialist evidence such as expert opinion evidence.<sup>370</sup>

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<sup>367</sup> C Thomas *Are Juries Fair?* (Ministry of Justice 2010), 36-37

<sup>368</sup> J Stone 'Are We Doing Enough to Ensure Juries Understand Expert Evidence and Judicial Directions?' (2017) 4 *Archbold Review* 5

<sup>369</sup> B Leveson *Review of Efficiency in Criminal Proceedings* (Courts and Tribunals Judiciary 2015)

<sup>370</sup> Criminal Practice Directions – October 2015 as amended April 2016 and October 2017  
26K.11 A route to verdict, which poses a series of questions that lead the jury to the appropriate verdict, may be provided by the court (CrimPR 25.14(3)(b)). Each question should tailor the law to the issues and evidence in the case.

26K.12 Save where the case is so straightforward that it would be superfluous to do so, the judge should provide a written route to verdict. It may be presented (on paper or digitally) in the form of text, bullet points, a flowchart or other graphic.

26K.13 Where the judge decides it will assist the jury, written materials should be provided. They may be presented (on paper or digitally) in the form of text, bullet points, a table, a flowchart or other graphic.

26K.14 For example, written materials may assist the jury in relation to a complex direction or where the case involves:

- A complex chronology;
- Competing expert evidence; or
- Differing descriptions of a suspect.

Although this case did not concern expert evidence, *R v Brown*<sup>371</sup> is of relevance as it perhaps gives some indication of the limits set on the need for a written route to verdict. Appealing against conviction for robbery, assault, and false imprisonment, one of the grounds for appeal was that the incoherence of the summing up was such that 'in the absence of a written route to verdict to assist the jury, the convictions are unsafe.'<sup>372</sup>

Quashing the conviction in part because of the failure to deliver a written route to verdict, the Court of Appeal (seemingly critical of the structure and the content of the trial judge's summing up) stated that:

Not every trial requires a written route to verdict. However, where none is provided to assist the jury, it is all the more important that the legal directions given to the jury by the judge orally are well structured and defined, with a clear focus on each issue and the evidence that might be relevant to that issue... Its absence and the unstructured guidance given to the jury by the judge on the legal issues without any marshalling of the facts was a recipe for disaster.<sup>373</sup>

One possible interpretation of this is that it could be seen as the Court of Appeal actively managing the courts to follow the requirements of the CPD. If this proves to be the case going forward, it is to be hoped that a similar approach is taken in respect of the CrimPR; as noted in Chapter 4, the evidence appears to indicate that these are not consistently adhered to.

As previously noted, the convention in the English courts that the jury deliberations remain confidential mean that it is not possible to determine how the jury reached the verdict, as such it remains unknown and unknowable if the jury did indeed understand

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<sup>371</sup> *R v Brown* [2017] EWCA Crim 167

<sup>372</sup> *ibid* [27]

<sup>373</sup> *ibid* [71]

the expert evidence and apply it correctly in their deliberations. However, the examination of explained verdicts is outwith this thesis.

Returning to the previously noted Bond Solon figures, 60% of experts who give evidence believed the jury do not fully understand this evidence.<sup>374</sup> This may mean that jurors understood part of the evidence, none of the evidence or, even worse, were confident they understood the evidence, but actually did not. That being the case, the logical question is what can the courts do to support the jury such that the deliberations are based only on the evidence presented, not on another set of evidence which is the 'misunderstood' set?

## **5.2 Alternative methods to better manage expert evidence?**

### **5.2.1 Concurrent and Consecutive Evidence**

Concurrent and consecutive evidence are two alternate approaches which have been used with some success, originating in Australia but now seeing limited use elsewhere and subject, at least in the case of concurrent evidence, to considerable academic debate.

Concurrent evidence or 'hot tubbing', is described by McLellan HJ as:

...a discussion chaired by the judge in which the various experts, the parties, the advocates and the judge engage in a cooperative endeavour to identify the issues and arrive where possible at a common resolution to them. Where resolution of issues is not possible, a structured discussion with the judge as the chairperson, allows the experts to give their opinions without the constraints of the adversarial process and in a forum which enables them to respond directly to each other. The judge is

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<sup>374</sup> Bond Solon *Annual Expert Witness Survey Report 2016 First Joint Annual Expert Witness Survey in Collaboration with The Times*, 4

not confined to the opinion of one advisor but has the benefit of multiple advisors who are rigorously examined in public.<sup>375</sup>

The technique has been used successfully in Australia and, following the report of Jackson LJ into civil litigation costs,<sup>376</sup> a pilot scheme was set up in the Manchester Construction Courts. Between June 2010 and December 2011, 18 cases were identified as meeting the pilot criteria. Only three of those went to trial, as such the evaluation was based on a small sample and thus the interim report notes 'there is insufficient data to reach solid conclusions as to the effectiveness of the procedure.'<sup>377</sup> While recognising the need for greater data collection, the report does conclude that evidence so far is positive and that concurrent evidence should remain available to the courts.

This became the case with provisions that came into effect on 1 April 2013 under practice direction 35 of the civil procedure rules (CPR) where the court 'can direct that some of all of the evidence of experts from like disciplines shall be given concurrently.'<sup>378</sup> There are reported cases wherein concurrent evidence has been taken as per the practice direction,<sup>379</sup> and interestingly in the case *Swain v Swain*<sup>380</sup> the judge agreed to expert evidence being taken concurrently over the objection of one of the claimants.

The Civil Justice Council undertook a more comprehensive assessment of the situation following the amendment.<sup>381</sup> Surveys were distributed to the judiciary (n=14), legal practitioners (n=33) and expert witnesses (n=51). Considering four of the key

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<sup>375</sup> P McClellan 'New Method with Experts – Concurrent Evidence'(2010) 3 *Journal of Court innovation* 259, 264

<sup>376</sup> R Jackson *Review of Civil Litigation Costs: Final report* (December 2009), 3.23

<sup>377</sup> H Genn *Manchester Concurrent Evidence Pilot – Interim Report* (UCL Judicial Institute 2012) at para 13

<sup>378</sup> Practice Direction 35 11.1

<sup>379</sup> *Unwired planet international Ltd v Huawei Technologies Co Ltd and others* [2017] EWHC 2988 (pat) [58]

<sup>380</sup> *Swain v Swain* [2015] EWHC 660 (Ch) [3]

<sup>381</sup> Civil Justice Council, *Concurrent Expert Evidence and 'Hot-Tubbing' in English Litigation Since the 'Jackson Reforms'* (2016)

objectives of the Jackson reforms (time saving, quality of expert evidence, assisting the court and cost saving) the review concluded that:

- Concurrent evidence saved time at trial, although the preparation time for effective use of the technique was greater, as such it is perhaps more about time being reallocated.
- Over 80% of the judges and legal practitioner respondents considered the quality of the expert evidence was improved when given via the hot-tub, with 60% of experts stating they felt the hot-tub improved the quality of the evidence given.
- Even more strikingly 100% of judges and 94% of legal practitioners' responses indicated that they believed hot-tubbing assisted the court in terms of disputed expert evidence. A significant majority of the experts were in agreement (71%).
- One of the objectives of the reforms had been that of cost saving, interestingly less than half of the respondents believed that the approach saved costs.<sup>382</sup>

Samuels<sup>383</sup> notes that the practice of concurrent evidence is generally liked by both judges and experts, that there is a belief that the quality of expert evidence gained via this approach is improved, and that the process is less adversarial and generally more constructive. Samuels further notes that concurrent evidence is widely used in technical cases such as those coming before the technical and construction courts,<sup>384</sup> but can also be successfully used in all types of cases, although interestingly the list of examples given notably excludes criminal cases.

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<sup>382</sup> *ibid* 57-61

<sup>383</sup> A Samuels 'A Body of Evidence' (2016) 166 *New Law Journal* 21

<sup>384</sup> e.g. *Bluewater Energy Services BV v Mercon Steel Structures BV* [2014] EWHC 2132 (TCC)

Writing more recently, Edmond et al<sup>385</sup> express the concern that the limited evidence for the effectiveness of concurrent evidence in a limited range of circumstances is outweighed by its potential impact on the fundamental nature of the adversarial system within this jurisdiction, concluding that:

We should be confident that abandoning traditional roles and procedures, and embracing more explicitly inquisitorial approaches to expertise, will actually improve the quality of the evidence, comprehension, fairness, rectitude, access to justice and party satisfaction before moving to adopt them.<sup>386</sup>

Whilst this is argued in terms of civil litigation, any such concern must logically apply to any such move within the criminal setting.

With regard to consecutive evidence, the practice of calling experts 'out of order' is not unheard of and does not occur infrequently, largely because of the availability of the experts.<sup>387</sup> The option for consecutive evidence in the English courts would appear to run contrary to the CrimPR rule 25.9<sup>388</sup> which clearly identifies the requirement that the prosecution case is completed prior to the introduction of the defence case.

However, there is some limited support in the case law that witnesses can be called out of order on occasion. In *R v Sutton*<sup>389</sup> the Court of Appeal held that calling one of the defence witnesses first, before the prosecution case, deprived the accused of a fair trial. Hooper LJ said:

In our view, requiring the expert to give evidence first deprived the appellant of a fair trial. It must have been extremely difficult for the jury to

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<sup>385</sup> G Edmond, AP Ferguson and T Ward, 'Assessing Concurrent Expert Evidence' (2018) 37 *Civil Justice Quarterly* 344

<sup>386</sup> *ibid* 366

<sup>387</sup> Personal Comment J Robson

<sup>388</sup> CrimPR 29.5 Procedure on plea of not guilty

<sup>389</sup> *R v Sutton* [2008] EWCA Crim 3129

follow the evidence of the psychiatrist...they were having to listen to evidence describing the expert's view of the defendant's mental state without having had the benefit of seeing the defendant, hearing his account...

*Without suggesting that the defence witnesses can never be called out of order [author italics], in our view this was not the right approach in this case.*<sup>390</sup>

While clearly not encouraging witnesses to be called out of order, this ruling would appear to leave the route open in some circumstances. In this case, it was simply that the witness in question was only available on that day, but could there be other circumstances where it could be argued that consecutive evidence could serve justice? It should also be noted that PACE s79 allows the court discretion to change the order in which witnesses are called. It should be noted that this is only in the context of the order of the defence witnesses, although as noted *Sutton* does appear to leave other options open.

It should also be noted that this has effectively been subsumed within Part 3 of the CrimPR which gives the judge wide latitude in case management to aid the court in reaching the overriding objective 'that criminal cases be dealt with justly.'<sup>391</sup>

One has to look further afield for the use of concurrent or consecutive evidence in the criminal courts with the use of both concurrent and consecutive evidence part of the Criminal Procedure Rules of Victoria (Australia). Practice note No 2 of 2014 states:

11.1 Where —

- (a) two or more parties have served expert evidence relating to the same issue or relating to two or more closely related issues;

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<sup>390</sup> *ibid* [16]-[17]

<sup>391</sup> CrimPR 1.1(1)

- (b) the commissioning parties agree; and
- (c) the Court so orders,

evidence may be given by the experts consecutively (i.e. one after the other) or concurrently (i.e. with all of the experts present in court, sworn, or affirmed at the same time).

11.2 The procedure to be followed for consecutive or concurrent evidence is to be determined by the court, with the expectation that the parties will have conferred in advance and attempted to agree on the procedure.<sup>392</sup>

Although not directly comparable, the closest equivalent in this jurisdiction in criminal cases is the provision for the appointment of a single joint expert under r 19.7 of the CrimPR. This states that:

- (1) Where more than one defendant wants to introduce expert evidence on an issue at trial the court may direct that the evidence on that issue is to be given by one expert only.

There do not appear to be any reported criminal cases in which a single joint expert was instructed to act for two or more defendants in accordance with this rule. This obviously leaves open the possibility that this may have occurred at Crown Court level, and unless this was grounds for appeal is likely to remain unreported. It is worth noting in *R v Blasiak*<sup>393</sup> that the psychiatrist treating the complainant was initially agreed to by prosecution and defence as 'single joint' expert as to the complainant's mental health and her reliability as a witness. The defence subsequently objected as the report by the psychiatrist did not address the issue of witness reliability and made a successful application to instruct their own expert.<sup>394</sup>

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<sup>392</sup> Supreme Court of Victoria Practice note No. 2 of 2014 *Expert Evidence in Criminal Trials*

<sup>393</sup> *R v Blasiak* [2010] EWCA Crim 2620

<sup>394</sup> *ibid* [13]



So although there is currently nothing directly comparable in this jurisdiction, both consecutive and concurrent evidence have been used to some effect in Australia. In consecutive evidence, the defence expert immediately follows the prosecution expert(s), this may avoid the issue noted of long gaps between the evidence. This is of particular relevance if one considers the recency effect. It is well recognised in memory literature that individuals remember more recent events, so in the context of the jury, the recency effect indicates that jurors are more likely to recall evidence presented later in the case.<sup>395</sup> Costabile and Klein<sup>396</sup> undertook mock juror studies and determined that evidence presented late in the trial was more likely to be remembered, and thus influence the verdict, than the same evidence presented earlier in the trial. Of course, a potential disadvantage of such an approach could be that by being able to compare the testimony of the two experts in such close proximity, there is a possibility that this may lead to comparison of the experts rather than their evidence.

Shortly after the practice note No 2 came into effect, the whole notion of consecutive evidence was called into question by the Victoria Court of Appeal. In *Ta-Vuong v R*<sup>397</sup> the defence expert witness was called immediately after the prosecution expert in the middle of the prosecution case. The Court of Appeal noted that this was based on the practice direction, but questioned the legality of the action, and thus the direction. Priest JA (with Croucher AJA agreeing)<sup>398</sup> noted that:

No matter how convenient it might be thought to be to call a defence expert before the prosecution case is concluded, in my view it is not a course authorised by statute. Indeed, it seems to me that s226 of the *Criminal Procedure Act 2009* contemplates that an accused is entitled

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<sup>395</sup> ML Howe, LM Knott and MA Conway *Memory and Miscarriages of Justice* (Routledge, London 2018), 142

<sup>396</sup> KA Costabile and SB Klein 'Finishing Strong: Recency Effects in Juror Judgments' (2005) 27 *Basic and Applied Psychology* 47

<sup>397</sup> *Ta-Vuong v R* [2015] VSCA 238

<sup>398</sup> *ibid* [125]

“to answer the charge by choosing to give evidence or call other witness to give evidence or both” only after “the close of the case for the prosecution”. In the circumstances of this case, however, the course taken with respect to the evidence of the experts can have had no effect on the verdict.<sup>399</sup>

Showing a high degree of responsiveness this concern was addressed in the 2015 iteration of the Criminal Procedure Act (CPA) with the Judicial College of Victoria noting that the revised provision permits both the prosecution and the accused to ‘split their case in relation to expert witnesses.’<sup>400</sup> This indicates a high degree of commitment on the part of the state legislature and the judiciary to ensure this technique can be successfully applied in the criminal setting. However, reviewing reported cases from Australia via Lexis International no other cases were identified where consecutive evidence was presented in a criminal case.<sup>401</sup>

Considering next the use of concurrent evidence, Freckleton et al. note that the main use is in civil cases; they do, however, note that there has been some use of the approach either before a judge sitting alone or in voir dire and before magistrates in summary proceedings in New South Wales.<sup>402</sup> Reviewing the Westlaw International database of Australian cases, there is only limited use made of concurrent evidence in the criminal courts and interestingly none have been located where that evidence was heard in front of a jury.<sup>403</sup>

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<sup>399</sup> *ibid* [110]

<sup>400</sup> Judicial College of Victoria – *Victorian Criminal Proceeding Manual* at 5.6.2.5 last updated 3/04/17 <http://www.judicialcollege.vic.edu.au/eManuals/VCPM/index.htm#64414.htm> accessed 10/07/18

<sup>401</sup> The fact that only a minority of cases are reported and that they are primarily appellant cases means that this finding cannot be taken to mean there are no such cases

<sup>402</sup> I Freckleton, J Goodman-Delahunty, J Horan and B McKimmie *Expert Evidence and Criminal Jury Trials* (Oxford University Press New York, 2016), 3.50

<sup>403</sup> Cases identified were *R v Wilson* [2015] NSWSC 1538 – fitness to be tried; *Yazdani v The Queen* [2016] NSWCCA 194 – concurrent evidence given by appellants and crown expert [81-82]; *R v Waszczuk* [2012] NSWSC 380 – fitness to be tried; *R v Papley* [2017] NSWSC 1068 – Arguing defence of mental illness in child death case.

Although heard before a single judge, perhaps the most widely reported case was the high profile murder trial *Western Australia v Rayney*.<sup>404</sup> This case was the first use of concurrent evidence in a West Australian criminal court;<sup>405</sup> two of the experts gave evidence concurrently at the suggestion of both counsel. The judge made no comment as to any legal principle underpinning the use of concurrent evidence, but did note 'they were impressive witnesses who were careful in staying within their area of expertise'.<sup>406</sup> The tone of this does not indicate that the judge found taking evidence in this format problematic. It should be noted that both of the experts were those called by the Crown and were identified as having overlapping areas of expertise.

It is also worth noting the comment attributed to the state prosecutor that such a move would quicken proceedings.<sup>407</sup> If one considers the increasing financial pressure on the public sector, likely in all jurisdictions, it seems probable that an intervention which does not give a concern of unfairness, and saves time and thus money, will be positively evaluated and thus pressure may increase to actively consider such measures outside the intended area of use.

A possible manifestation of such 'mission creep' may be evident in a recent civil proceeding before the Supreme Court of Western Australia. Following the outcome of the criminal case, Rayney launched a defamation suit against the police.<sup>408</sup> As part of this hearing, three journalists who covered a press conference where the alleged defamation occurred were called to the stand simultaneously to give evidence as to the questions they asked in the press conference. Given that concurrent evidence generally relates to expert testimony, this may be seen a departure, although it should be noted that in Western Australia there is no specific legislation addressing

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<sup>404</sup> *Western Australia v Rayney* [no 3] [2012] WASC 404

<sup>405</sup> AL Brown 'Bra links death to home: The Rayney trial' *WAtoday* (15/08/12) <https://www.watoday.com.au/national/western-australia/bra-links-death-to-home-the-rayney-trial-20120814-246hl.html> accessed 01/07/18

<sup>406</sup> *Western Australia v Rayney* [no 3] [2012] WASC 404 [971]

<sup>407</sup> W Caccetta 'Red brick fragment on Corryn Rayney bra a 'remarkable' match to family home' (14 August 2012) *Perth Now Sunday Times* <https://www.perthnow.com.au/news/nsw/red-brick-fragment-on-corryn-rayney-bra-a-remarkable-match-to-family-home-ng-70d43765ccc65189da0f6eaac82e72ea> accessed 01/07/18

<sup>408</sup> *Rayney v The State of Western Australia* [No9][2017] WASC 367

concurrent evidence. According to press coverage, the approach was agreed by the judge following a suggestion by the state lawyer to save court time.<sup>409</sup> The official judgment simply notes the cross examination of three journalists called by the plaintiff, with no mention of the evidence being taken concurrently.<sup>410</sup>

The issue that the use documented thus far leaves open is exactly how such evidence would be approached in the case of a jury trial. The view of respondents in the Freckleton et al research, was that judges and prosecutors were generally enthusiastic, with defence lawyers generally (although not exclusively) more guarded, part of the concern being that prosecution experts were more likely to be mainstream, whereas defence experts could be more 'fringe' and as such they expressed concern as to how well this would stand up if comparing the two.<sup>411</sup>

However, if one returns to the use made of concurrent evidence in the *Rayney* case this may actually illustrate a logical 'half way house' which could be considered by the English criminal courts. Unlike the concurrent evidence wherein both parties' experts 'hot tub', in that case only 2 of the 10 expert witnesses were heard concurrently, because of the overlapping nature of their evidence.

Interestingly, there is evidence of such an approach having been taken within a coroners' court in the north-west of England in front of a jury, wherein two clinicians gave evidence concurrently.<sup>412</sup> It should, however, be noted that the procedure within a coroners' court is very different to that within a criminal trial, being inquisitorial in nature. Nonetheless, this is worthy of note as it may indicate that a jury can address issues of concurrent evidence. Unfortunately, no judicial or academic comment can be located as to the effectiveness of such an approach in front of a jury.

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<sup>409</sup> T Clarke 'Journos testify in rare hot tub' *The West Australian* (16/03/17) <https://thewest.com.au/news/wa/journos-testify-in-rare-hot-tub-ng-b88417761z> accessed 01/07/18

<sup>410</sup> *Rayney v The State of Western Australia* [No9][2017] WASC 367 [137]

<sup>411</sup> I Freckleton, J Goodman-Delahunty, J Horan and B McKimmie *Expert Evidence and Criminal Jury Trials* (Oxford University Press New York, 2016), 3.56

<sup>412</sup> A colleague of the author gave evidence concurrently, and the author has written confirmation from the Hospital Trust solicitor concerned that concurrent evidence in front of a jury has taken place on a number of occasions in one coronial district.

It is perhaps also worth returning to the previous comment that the judge in the criminal trial made no comment as to legal principles underpinning the decision to use concurrent evidence, and to note the fact that unlike the State of Victoria, Western Australia (WA) has no specific rule relating to concurrent evidence. However the WA CrimPR, with regard to pre-trial hearing at r34(3)(d) allows that:

with the consent of the parties, and where the court thinks it desirable and convenient to do so, direct that evidence be given at the trial other than strictly in accordance with the laws of evidence.<sup>413</sup>

It is argued that this may be regarded as a statement of an underpinning principle where unnecessary restrictions are eased to achieve the aims of justice. An alternative view could, it is argued, be that by allowing convenience to become a principle guiding the application of law, the possibility exists that convenience could slip into compromise and thus potentially lead to a 'slippery slope'.

So could such an innovation be possible within the English courts? There is nothing within the CrimPR which either explicitly prohibits or allows concurrent evidence. It is, however, worth considering an analysis of the FRE undertaken by Welch,<sup>414</sup> who, noting that nothing specifically permitted 'hot tubbing' argued that the admission of concurrent evidence may be possible under the FRE citing Rule 102 which states:

[t]hese rules shall be constructed to secure fairness in administration, elimination of unjustifiable expense and delay, and promotion of growth and development of the law of evidence to the end that the truth may be ascertained and proceedings justly determined.

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<sup>413</sup> Western Australia Criminal Procedure Rules 2005

<sup>414</sup> S Welch 'From Witness Box to the Hot Tub: How the "Hot Tub" Approach to Expert Witnesses Might Relax an American Finder of Fact' (2010) 5 *Journal of International Commercial Law and Technology* 154

Welch notes that 'rule 102 gives the trial judge the authority to fashion evidentiary procedures to deal with situations not specifically covered by the rules.'<sup>415</sup> Although Welch was considering concurrent evidence in the context of civil litigation, it should be noted that the FRE apply to both civil and criminal cases, as such, if such an argument were supportable then it could equally be applied to criminal cases. Interestingly, Welch does note that although his paper does not argue that concurrent evidence could never come before a jury in a criminal trial that such a move would add a new realm of complexity.<sup>416</sup>

If one then compares this to the overriding objectives of the CrimPR:

CrimPR 1.1-(1) is that criminal cases be dealt with justly

(2) Dealing with a criminal case justly includes

- (a) acquitting the innocent and convicting the guilty
- (b) dealing with the prosecution and the defence fairly
- (e) dealing with the case efficiently and expeditiously
- (g) dealing with the case in ways that take into account

...

- (iv) the needs of other cases

Arguably, the same principles are captured in that the need to deal with a case justly is core to both the FRE and the CrimPR, as is the need for fairness and efficiency, which by implication includes cost containment. This being the case, and noting that the pilot for concurrent evidence in the civil courts occurred prior to the changes in the CPR, it is argued that, should the will exist, so could the possibility of elements of concurrent evidence appearing before a jury.

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<sup>415</sup> *ibid* citing The Advisory Committee Notes at fn 99

<sup>416</sup> *ibid* citing The Advisory Committee Notes at fn 100

### 5.2.2 The Non-jury Trial

A further possibility which warrants consideration is that of non-jury trials in the event a case is going to be based entirely on complex expert evidence. The notion has been aired by legal academics, with Peter McClellan, a Chief Judge of the Supreme Court of NSW, discussing the challenges faced maintaining the current system. He considers both the complexity of expert evidence, and also the cost of maintaining the current system noting 'a trial with only a judge, or multiple judges, will be far less time consuming and would result in significantly reduced expense to the state'.<sup>417</sup> The tenor of the piece does not indicate that this is the direction McClellan CJ would wish to take, but acknowledges it as a possibility. Writing about the system of plea bargaining that exists in the US, Langbein<sup>418</sup> argues that this practice has largely eliminated criminal jury trials, once again noting, with apparent distaste, that cost to the state argues against the universal use of the jury trial.

The following examination of the use of non-jury trials in the UK and the Commonwealth do not relate directly to expert evidence, but rather are an indicator of the willingness (or otherwise) to consider the use of non-jury trials generally.

The Diplock Courts of the 1970s during the Troubles in Northern Ireland are the last time widespread non-jury trials took place. The Diplock Courts, in which a single judge tried serious criminal cases without a jury, were introduced in 1973 and heard large numbers of cases before being disbanded as part of the peace process in 2007. It is worth noting the words of the then Northern Ireland Secretary before the introduction of the emergency provisions legislation in 1973:

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<sup>417</sup> e.g. P McClellan 'The future Role of The Judge: Umpire, Manager, Mediator or Service Provider?' (2011) *NSW Judicial Scholarship* no 44

<sup>418</sup> JH Langbein 'On the Myth of Written Constitutions: The Disappearance of Criminal Jury Trial' (1992) *Yale Law School Faculty Scholarship Series Paper* 548 at 125

Given the cessation of violence for political ends in Northern Ireland, the Government will be only too glad to see these provisions brought to an end.<sup>419</sup>

This statement may be taken as an indication of the reluctance with which such changes were instigated.

While the situation in Northern Ireland is the highest profile example of non-jury trials, it is not the only such example. In August 2012, the Under-secretary of State for Foreign and Commonwealth Affairs announced the suspension of the constitutional right to trial by jury in the Turks and Caicos Islands (TCI) in response to systemic corruption within TCI.<sup>420</sup> The TCI Constitution (interim amendment) Order 2009 (SI 2009/701) removed the absolute right to trial by jury and provided for a judge to order a trial in the absence of a jury if it was in the interests of justice. The only reported trial under these provisions was *Misick v the Queen*.<sup>421</sup>

More recently, provisions under the Criminal Justice Act 2003 were enacted to allow for trial without jury (a) in complex fraud cases, and (b) where jury intimidation was a factor. Section 43, which allowed for the non-jury trial of complex fraud was, however, repealed by s 113 of the Protection of Freedoms Act 2012, without ever having been brought into force. However, it is instructive to revisit elements of the debate in relation to s 43. The strength of feeling against this move was captured by Baroness Kennedy QC in the Lords committee stage of the Criminal Justice Bill 2002-03 debate who powerfully explained and supported the reason for and the strength of the jury system:

Juries keep the law honest and comprehensible because working with juries...puts an obligation on all of us to explain the law and the rules and

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<sup>419</sup> S Doran and J Jackson 'Diplock courts: A model for British justice?' *The Independent* (13 September 1995) <https://www.independent.co.uk/money/spend-save/diplock-courts-a-model-for-british-justice-1600830.html> accessed 13/06/18

<sup>420</sup> HL Deb 12 October 2009 Vol 713 Col15WS

<sup>421</sup> *Misick and Others v The Queen (Turks and Caicos)* [2015] UKPC 31



to apply the standards of the public to what is right and wrong. The jury stops the law becoming opaque. It stops the law becoming closed and sometimes even dishonest.<sup>422</sup>

Interestingly the former Master of the Rolls, Lord Donaldson, supported the Government proposal noting that he ‘totally reject[s] the idea that the jury is the great bulwark of liberty against the establishment’ also expressing concerns that the unusually high conviction rate in jury fraud trials, as against non-fraud cases may indicate that the jury find the accused guilty because they do not understand the evidence and assume that the individual would not be on trial unless they were guilty.<sup>423</sup>

The resistance to s43 came not just from within the Houses of Parliament. The Law Society, Bar Council, and the human rights organisation Justice were all critical of the proposed implementation of s43 of the Act.<sup>424</sup>

Julien, commenting on s43, concluded that the state imposition of judge only trials would be a fundamental change to the English system of justice and would be a ‘serious step toward converting England and Wales judges into civil law judges’.<sup>425</sup>

Thus, while s43 never came into force, s44 has been brought into effect and provides the option for non-jury trials where there is a danger of jury tampering or where jury tampering has taken place. At the time of writing *R v Twomey (no2)*<sup>426</sup> is the only non-jury case to have been heard under the Act.

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<sup>422</sup> HL Deb 15 July 2003 Vol 651 col 776

<sup>423</sup> *ibid* cols 793-794

<sup>424</sup> M Peck ‘The Fraud (Trials without a Jury) Bill 2006-07’ (2006) *House of Commons Library Research Paper* 06/57, 20

<sup>425</sup> RF Julien ‘Judicial Perspectives in Serious Fraud Cases – The Present Status Of And Problems Posed by Case Management Practices, Jury Selection Rules, Juror Expertise, Plea Bargaining and Choice of Mode of Trial’ (2008) 10 *Criminal Law Review* 764

<sup>426</sup> *R v Twomey, Blake Hibberd and Cameron (No 2)* [2011] 1 Cr App R 29 CA

The reluctance of the judiciary to follow this path was clearly articulated in *R v J, S and M*, wherein the Crown had applied for the case to be heard without a jury pursuant to s 44(2) of the CJA. The Court of Appeal declined the application and speaking per curiam:

The trial of a serious criminal offence without a jury ... remains and must remain the decision of last resort, only to be ordered when the court is sure (not that it entertains doubts, suspicions or reservations) that the statutory conditions are fulfilled.<sup>427</sup>

However, it should be noted that there are a number of routes already present via which a trial, and thus potentially expert evidence, can be heard without a jury. For summary or triable either way cases, it should be noted that r 24 of the CrimPR allows that expert evidence may be called in a magistrates' court either in person or in writing.<sup>428</sup> Expert evidence does come before magistrates' courts,<sup>429</sup> although it is more likely that were this to happen a professional district judge is likely to be allocated to the case.<sup>430</sup> In the event that an individual is found guilty by a magistrates' court following a plea of non-guilty, under s 108 of the Magistrates' Courts Act 1980 this can be appealed to the Crown Court where the case will be re-heard without a jury.

The question of whether a non-jury trial would engage a defendant's rights under Article 6, was addressed by the Court of Appeal in *R v Twomey* when discussing the effect of a judge only trial in the case of jury tampering:

...the process of dispensing with a jury in a case where it is established that a jury trial is likely to be abused or subverted, the end result is not an

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<sup>427</sup> *R v J, S and M* [2010] EWCA Crim 1755 [H4]

<sup>428</sup> r 24.4(2)(a)(ii) and r 24.5(1)(b)

<sup>429</sup> e.g. expert evidence regarding breath tests *Regina (Bourne) v Scarborough Magistrates Court* [2017] EWHC 2828 (Admin); *R (on the application of the Crown Prosecution Service) v Sedgemoor Justices* [2007] EWHC 1803 (Admin)

<sup>430</sup> Law Commission, *A New Approach to the Determination of Evidentiary Reliability – a Consultation*. (Consultation paper No 190, 2009), B.14

unfair trial, but a trial by judge alone, where the necessary procedural safeguards available in a trial by jury are and remain available to the defendant ... The trial would take place before an independent tribunal, and..., for the purposes of article 6 of the European Convention of Human Rights, it is irrelevant whether the tribunal is judge and jury or judge alone.<sup>431</sup>

It should however be noted that this ruling applied to jury tampering, not the complex fraud cases (the aborted provision under s 43) which, it is argued, would have been analogous to the problems caused by expert evidence.

The previously considered Australian case, *Rayney*, was a non-jury trial. The application for a non-jury trial had been made by the defendant in light of the fact this was a high profile case, the accused was a QC and his charging attracted extensive publicity which the judge identified as potentially prejudicial to the accused.<sup>432</sup>

In that jurisdiction, a non-jury trial can be requested by either the accused or the prosecution under s118 of the Criminal Procedure Act 2004. The accused must agree to be tried by a judge alone, if the prosecution do not agree, the trial judge may still make a trial by judge order if they believe it would be in the interests of justice to do so.<sup>433</sup> Arguably, this is similar to the management of triable either way offences under English law where such cases must be tried by a jury unless both the accused and the magistrates' court agree to a summary trial either before the lay magistrates or a single district judge.<sup>434</sup> However, for indictable offences there is no option for judge alone trial, unlike Australia where this is the case.

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<sup>431</sup> *R v Twomey, Blake Hibberd and Cameron (No 2)* [2011] 1 Cr App R 29 CA [18]

<sup>432</sup> *Western Australia v Rayney* [no 3] [2012] WASC 404 [16]

<sup>433</sup> Criminal Procedure Act 2004 s 118 (1) – (4) [Western Australia]

<sup>434</sup> Magistrates' Courts Act 1980 s17A-23

The first Australian state to legislate for judge-only trials was South Australia in 1984,<sup>435</sup> followed by New South Wales 1990,<sup>436</sup> Australia Capital Territory 1993,<sup>437</sup> Western Australia 2004,<sup>438</sup> and Queensland in 2008.<sup>439</sup> Judge-only trials can only take place with regard to state level offences. Crimes being tried under federal statutes must be in front of a jury, this requirement having been set out in s80 of the Constitution,<sup>440</sup> and recently affirmed by the High Court of Australia.<sup>441</sup>

Although judge-only trials are possible in a range of states and territories in Australia, the evidence from NSW is that judge-only trials are the exception rather than the rule – at least in that jurisdiction. Between 1993 and September 2014, there were 14,833 jury trials compared to only 1,110 judge-only trials.<sup>442</sup>

An inquiry into judge-only trials was produced by the NSW Standing Committee on Law and Justice<sup>443</sup> in 2010. This addressed a number of issues of relevance within this thesis. The committee had highlighted two areas where a judge-only trial may be preferable, these were where the evidence was highly technical and also where the evidence related to particularly heinous crimes.<sup>444</sup> With regards to the issue of highly technical evidence, the participants giving evidence to the committee were split with some taking the view that that such evidence was better suited to a judge alone, with the evidence from the DPP noting:

We take the view that if the principal evidence is of a technical nature and there are issues that need to be resolved about that, a judge alone is in a

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<sup>435</sup> Juries Act 1927, version 5.3.2018, s7 [South Australia]

<sup>436</sup> Criminal Procedures Act 1986, s132 [New South Wales]

<sup>437</sup> Supreme Court Act 1933, s68B [Australia Capital Territory]

<sup>438</sup> Criminal Procedure Act 2004 s117-120 [Western Australia]

<sup>439</sup> Criminal Code and Jury Act and another Amendment Act 2008 s615 [Queensland]

<sup>440</sup> Commonwealth of Australia Constitution Act (The Constitution) s80 - Trial by Jury

<sup>441</sup> *Hamdi Alqudsi v The Queen* [2016] HCA 24

<sup>442</sup> P Krisenthal 'Judge Alone trials in NSW Practical considerations' (2016)

[https://criminalcpd.net.au/wp-content/uploads/2016/09/Judge\\_alone\\_trials\\_in\\_NSW\\_peter\\_krisenthal.pdf](https://criminalcpd.net.au/wp-content/uploads/2016/09/Judge_alone_trials_in_NSW_peter_krisenthal.pdf) accessed 29/12/18

<sup>443</sup> New South Wales Standing Committee on Law and Justice (2010) *Inquiry into judge alone trials under s.132 of the Criminal Procedure Act 1986 (Report no 44)*

<sup>444</sup> *ibid* 4.102-4.128

better position to master the evidence, to master the issues and to make the decisions that need to be made rather than having twelve laypeople coming to perhaps uncertain or conflicting views about aspects of the evidence and about the issues to be determined and ending up in a state of confusion.<sup>445</sup>

However, other participants noted the responsibility of counsel to ensure that technical evidence be made comprehensible and also highlighted the need 'to ensure that the community remains connected to the trial process.'<sup>446</sup>

The committee concluded that since it was difficult to define what constitutes 'truly abhorrent' or 'highly technical' evidence, it was more appropriate to leave the decision to apply for a judge only trial to counsel, and that the applicable test should be whether it is in 'the interests of justice.'<sup>447</sup> The committee went on to note that the 'interests of justice' is a well-established concept which the courts are well used to applying and which allows sufficient discretion as to the factors to be considered in an application for a judge-only trial.<sup>448</sup> Having noted this, the majority of the states or territories which legislate for judge-only trials have the likely complexity of the trial as one of the criteria supporting this approach. Interestingly, Edmond<sup>449</sup> notes that there is little evidence that judges address the issues of expert evidence any better than juries.

If one considers that the jury trial, as well as ensuring that the public are engaged in the judicial process, is also about bringing to bear the common-sense of the fabled 12 good men and true, this gives an obvious concern that a judge-only trial could be more about factual accuracy and application of the law, than on a judgment if something was 'reasonable' or how 'a man of the age and type of the defendant would react' in a given set of circumstances.

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<sup>445</sup> *ibid* 4.121

<sup>446</sup> *ibid* 4.127

<sup>447</sup> *ibid* 4.129-4.131

<sup>448</sup> *ibid* 5.24

<sup>449</sup> G Edmond 'Forensic Science Evidence and the Conditions for Rational (Jury) Evaluation' (2015) 39 *Melbourne University Law Review* 77, 124

The Australian legislation addresses this concern by having an 'objective community standard'. The courts recognise that this may sometimes be a difficult concept to apply precisely, and this is recognised if one considers the NSW legislation. In respect of orders for judge-only trial, the legislation states:

...the court may refuse to make an order if it considers that the trial will involve a factual issue that requires the application of objective community standards, including (but not limited to) an issue of reasonableness, negligence, indecency, obscenity or dangerousness.<sup>450</sup>

Although only considering a narrow range of sources, the reporting of judge-only trials in the Australian press does not appear to indicate any widespread public disquiet with the application of this approach, with reporting merely noting either that a judge-only or jury trial was held,<sup>451</sup> and it is arguable that by judge-only trials being instigated at the request of the accused they are actually an expression of the autonomous rights of that individual to select how they interact with the justice system and, as such, simply one more aspect of a move to an increasingly rights-based society.

For a change which has been in existence for a number of decades in some states, there is surprisingly little academic consideration and assessment of the change. Writing in 2011, O'Leary<sup>452</sup> noted the lack of recent academic writing on the subject of judge-only trials. A search of the journals section of Westlaw International using the search terms 'non-jury' and 'judge alone', generated a combined total of 14 titles where either of the terms was used, but in each case the reference was an

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<sup>450</sup> Criminal Procedures Act 1986 (NSW), s 132 (5)

<sup>451</sup> e.g. Rayney see fn 394 and 396; S Rawsthorne and S Keoghan 'The Obstacles to Convicting Chris Dawson of his Wife's Murder' *The Sydney Morning Herald* (8 December 2018) <https://www.smh.com.au/national/nsw/the-obstacles-to-convicting-chris-dawson-of-his-wife-s-murder-20181207-p50ky2.html> accessed 9/12/18; *Canberra Times* 'WA mother jailed after killing son while in a psychotic state' (7 December 2018) <https://www.canberratimes.com.au/national/western-australia/wa-mother-jailed-after-killing-son-while-in-a-psychotic-state-20181207-p50ky4.html> accessed 9/12/18

<sup>452</sup> J O'Leary 'Twelve Angry Peers or One Angry Judge: An Analysis of Judge Alone Trials in Australia' (2011) 35 *Criminal Law Journal* 154

acknowledgement of the use of such trials, with minimal to no comment as to the effectiveness or otherwise of the approach.

However, in England and Wales, the strength of the assertion previously cited by the Lord Chief Justice, coupled with the repeal of the option for non-jury trial in complex fraud trials, argues strongly against any such move in this jurisdiction. The possibility was arguably made more remote in a written statement to the House of Lords by Lord Hunt of Kings Heath, the then Parliamentary Under Secretary of State in the Ministry of Justice, who confirmed that there was no intention to extend the provision for trial without a jury beyond the provisions in the CJA 2003 and the DVCVA 2004.<sup>453</sup>

However, the pressures on the courts and judiciary in Australia noted by McClellan CJ, are, it is argued, little different to the pressures of time and cost that face the courts in England. That being the case, the pressure for change is unlikely to vanish and as such the possibility must exist that as with the US and Australia we may see that pressure pushing back the right to jury trial.

### **5.3 Conclusion**

There are, it is argued, some very practical steps that the courts can take to aid juror understanding of expert evidence; the first as noted within the Freckleton study is to ensure that the expert evidence is presented in a clear, logical, jargon free (or at least jargon lite) format. This requires that both counsel and judge select and marshal the experts effectively. However, a potential risk is that if, as evidence seems to suggest, jurors generally find experienced experts more credible, then these experts keep getting called and we return to the concern that only a limited range of expertise comes before the courts.

Potential flaws in the evidence presented by the experts, be it in the form of bias or the adducing of unreliable expert testimony on the other hand, are more open to judicial control. Rigorous application of the CrimPR should, it is argued, address some

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<sup>453</sup> HL Deb 29 September 2008, vol 703 Col 197WS

of the issues raised, but this is reliant on the judge acting as the gatekeeper in both name and deed. Williams and Saks<sup>454</sup> argue that judges fail to guard the gates. Although this was specifically in reference to permitting 'poor science' to come before the courts, the same it is argued can be said if judges fail to apply the CrimPR and thus permit biased, partial evidence to come before the jury. So it seems this element of potential control to ensure that evidence coming before the jury is appropriate already lies within the gift of the courts, as evidenced by the previously noted management of expert testimony in *R v H*.<sup>455</sup>

With regard to concurrent and consecutive evidence, it is clear that this form of evidence is being successfully adduced without explicit statutory provision in the majority of the Australian states studied, the exception being Victoria, where the use of consecutive evidence appears to have encountered some difficulties, which were subsequently addressed. This could, it is argued, show a degree of commitment to the approach which it can be inferred does mean that the courts deem the approach useful.

It could be argued that the rule in Western Australia which allows evidence to be introduced 'other than strictly in accordance with the laws of evidence'<sup>456</sup> provides a considerable degree of latitude to the courts to introduce innovation. If one considers the introduction of concurrent evidence into the civil courts in England, while it is now part of the CPR, this was not the case at the time it was trialled, as such it can be argued that if the will to trial new approaches exists this can be done without changes to either legislation or the relevant procedure rules.

However, with regard to the criminal courts the apparent lack of any use of this format in front of a jury mean that there is no 'ready-made' pre-existing model which could be considered. *Practice Note No2* in Victoria stipulates that it is for the parties to agree

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<sup>454</sup> KEG Williams and MJ Saks 'Why Don't the Gatekeepers Guard the Gates? Comments prompted by Edmond (2015)' (2015) 36 *Adelaide Law Review* 109

<sup>455</sup> *R v H* [2014] EWCA Crim 1555 [44]

<sup>456</sup> WA CrimPR r34 (3)(d)



the procedure in advance, but again no case law could be located wherein a trial before a jury had occurred. It is perhaps, however, worth revisiting the use made of the technique in *Rayney*. As noted previously, only two of the 10 expert witnesses gave evidence concurrently. This is a much smaller, and thus potentially more palatable, step in both making overlapping areas of expertise more accessible to a jury, and also in streamlining and thus potentially making the trial process more efficient.

There currently seems to be little appetite for the notion of judge-only trials in this jurisdiction, but it is important to note that a former Master of the Rolls is not averse to the idea in the case of complex fraud, and legislatively Parliament has not shied away from the notion in extremis. These extreme positions are 'obvious' with the reaction to the Troubles in Northern Ireland, and corruption in the TCI, demanding action. It is also worth noting that the use of the jury in civil cases has changed radically over time. Until 1854, all civil cases were tried with a jury,<sup>457</sup> there are now only a very limited range of civil cases tried by jury. Although the rationale for the jury in civil cases was historically different to the rationale in criminal cases, the point to be made is that change can and has occurred. Despite such changes having occurred it seems the notion of the jury-free trial for cases heavily reliant on expert evidence remains a remote prospect.

However, given that Australia has been utilising this approach for some years with, it appears, no ill effects on the administration of justice as the judge-only trial constitutes only a small portion of cases, it does beg the question of whether the trenchant rejection of the judge alone trial is a manifestation of dogma rather than a rational and reasoned consideration of the notion?

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<sup>457</sup> The Common Law Procedure Act 1854 made jury trial optional for Civil Cases in the Royal Courts at Westminster. For a useful examination of the decline of the Jury in Civil cases see C Hanly 'The Decline of the Civil Jury Trial in Nineteenth-Century England' (2005) 26 *Journal of Legal History* 253

Judicial reasoning can be seen to evolve in response to external factors, consider for example the strongly paternalistic judgment in the civil case *Sidaway*<sup>458</sup> in 1985 and 30 years later the ringing endorsement of patient autonomy in *Montgomery*<sup>459</sup> in 2015. Such a move is reflecting wider changes in society, if we consider the objective of the Law Commission is to 'ensure the law is as fair, modern, simple and as cost effective as possible'<sup>460</sup> and the comments made by McClellan CJ, it seems clear that the pressure to deliver justice on an ever tighter budget will continue and just possibly rigorous policing of the CrimPR and elements of concurrent evidence may enable the courts to do precisely that.

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<sup>458</sup> *Sidaway v Board of Governors of the Bethlem Royal and Maudsley Hospital* [1985] AC 871

<sup>459</sup> *Montgomery v Lanarkshire Health Authority* [2015] UKSC 11

<sup>460</sup> The Law Commission (2018) About us. <https://www.lawcom.gov.uk/about/> accessed 15/07/18

## Chapter 6: Is the *Turner* Principle Fit for Purpose? A Case Study of Eyewitness and Earwitness Evidence

### 6.0 Introduction

Up to this point, this thesis has focussed on and analysed the management and possible approaches to expert evidence by the courts. However, expert evidence does not exist in a vacuum, appearing only within the trial; it can also be used to inform other stages within the criminal justice system. The case studies in this chapter consider the use of expert evidence as part of the whole system through the medium of eyewitness and earwitness (voice identification) evidence.

There are fundamental differences in the way in which the courts utilise expert evidence with regard to these two forms of evidence and in this chapter consideration will be given to both the underpinning scientific evidence and case law. Consideration will also be given to the wider systemic issues wherein expert evidence is utilised pre-trial to ensure that identification which does come before the courts is reliable, before suggesting possible changes which would better enable the jury to reach a rational decision and, hopefully, the truth.

As previously noted, the Law Commission consultation was narrowly focussed on the issue of reliability of proffered expert testimony, and excluded the other elements from *Bonython* relating to competence, the restatement of the *Turner* test and impartiality, noting that they were ‘relatively uncontroversial,’<sup>461</sup> while acknowledging that they may give rise to occasional problems in application.

The *Turner* principle was outlined in Chapter 3, but requires closer examination in the context of this chapter. To re-iterate, *Turner* states that expert opinion is only admissible if it:

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<sup>461</sup> Law Commission, *A New Approach to the Determination of Evidentiary Reliability – a Consultation*. (Consultation paper No 190, 2009),1.8

... 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.<sup>462</sup>

Lawton LJ further held that:

Jurors do not need psychiatrists to tell them how ordinary folk who are not suffering from any mental illness are likely to react to the stresses and strains of life.<sup>463</sup>

There has been considerable academic commentary regarding the perceived difficulties with this seemingly straightforward assertion. Muzaffar highlights the difficulty raised by such an assertion, noting that the idea of a clear-cut distinction between mental illness and normality does not fit with the current understanding of mental illness,<sup>464</sup> further noting the difficulty of bringing together the differing approaches and philosophies of law and psychiatry.<sup>465</sup> Coleman and Mackay argued that expert help was sometimes needed by jurors to better enable them to understand what is normal and abnormal conduct,<sup>466</sup> having previously noted that 'the assumption of a clear dividing line between normality and abnormality is misconceived'.<sup>467</sup> Redmayne argues that the rule 'does not encourage careful analysis of expert evidence, and can

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<sup>462</sup> *R v Turner* [1975] QB 834 at 841

<sup>463</sup> *ibid* 842

<sup>464</sup> S Muzaffar 'Psychiatric Evidence in Criminal Courts: the Need for Better Understanding' (2011) 51 *Medicine, Science and the Law* 141, 142

<sup>465</sup> *ibid* 145

<sup>466</sup> AM Coleman and R D Mackay 'Equivocal Rulings on Expert Psychological and Psychiatric Evidence: Turning a Muddle into a Nonsense' (February 1996) *Criminal Law Review* 88

<sup>467</sup> R D Mackay and AM Coleman 'Excluding Expert Evidence: a Tale of Ordinary Folk and Common Experience' (November 1991) *Criminal Law Review* 800, 805

lead to bad decisions.<sup>468</sup> Commenting recently, Hallett notes that ‘there is ambiguity about what is within the common experience and understanding of a jury’.<sup>469</sup>

It will be argued that this ambiguity is, in the case of eyewitness and earwitness identification evidence, adversely impacting the ability of jurors to rationally assess such evidence, leading, in some cases, to miscarriages of justice.

While acknowledging the concerns about ambiguity, it needs to be noted that the courts have shown flexibility in their application of *Turner* in respect of a number of issues. In *R v Ward*,<sup>470</sup> when considering the reliability of the appellant’s confession evidence, the Court of Appeal rejected any requirement of a recognised mental health diagnosis, stating:

... we conclude on the authorities as they now stand that the expert evidence of a psychiatrist or a psychologist may properly be admitted if it is to the effect that a defendant is suffering from a condition not properly described as mental illness, but from a personality disorder so severe as properly to be categorised as mental disorder ...<sup>471</sup>

In *R v O’Brien*,<sup>472</sup> the courts clarified and set limits on the statement from *Ward* as to when expert evidence relating to the potential unreliability of confession evidence was acceptable:

...the abnormal disorder must not only be of the type which might render a confession or evidence unreliable, there must also be a very significant deviation from the norm shown.<sup>473</sup>

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<sup>468</sup> M Redmayne *Expert Evidence and Criminal Justice* (Oxford University Press 2001), 196

<sup>469</sup> N Hallett ‘Psychiatric Evidence in Diminished Responsibility’ (2018) 82 *Journal of Criminal Law* 442, 443

<sup>470</sup> *R v Ward* (1993) 96 Cr App R 1

<sup>471</sup> *ibid* 66

<sup>472</sup> *R v O’Brien* [2000] Crim LR 676; [2000] 1 WLUK 529 CA

<sup>473</sup> Full judgment contains no paragraph or page numbers

The courts have thus moved from the position that expert evidence as to abnormal psychological conditions is admissible only if there is a recognised mental illness, to one in which the boundary between normal and abnormal psychology is blurred, the important thing being that it must still be something outside the ordinary knowledge of experience of the average juror.

## **6.1 Eyewitness Identification Evidence**

### **6.1.1 Expert evidence and eyewitness testimony in the courts**

Mistaken eyewitness identifications contributed to approximately 71% of the more than 360 wrongful convictions in the United States overturned by post-conviction DNA evidence.<sup>474</sup>

The figure above from the Innocence Project gives some idea of the potential concerns and level of mistaken eyewitness identification evidence. Although these figures apply to the US, there is equally clear evidence that this is a concern in this jurisdiction.

One of the most notorious miscarriages of justice relating to eyewitness testimony occurred more than 100 years ago, and led directly to the formation of the Court of Criminal Appeal. Adolf Beck was convicted once and almost convicted a second time on the basis of eyewitness identification evidence, with at least 15 individuals, under oath, attesting to the fact that Beck was the person who robbed them.<sup>475</sup> The impact of this case was such that it is still on occasion cited by the courts as a cautionary story of the potential impact of identification evidence.<sup>476</sup>

The power of confident eyewitness identification evidence cannot be under-estimated. The US Supreme Court powerfully acknowledged this point noting:

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<sup>474</sup> Innocence Project, 'Eyewitness Identification Reform' (nd)

<https://www.innocenceproject.org/eyewitness-identification-reform/> accessed 09/08/19

<sup>475</sup> B Cathcart 'The Strange Case of Adolf Beck' *The Independent* (17/04/04)

<https://www.independent.co.uk/news/uk/crime/the-strange-case-of-adolf-beck-535209.html> accessed 23/02/19

<sup>476</sup> *R v O'Reilly* [1967] 2 QB 722 [726], *Hanif v HM Advocate* 2009 SCL 154 commentary

...there is almost *nothing more convincing* than a live human being who takes the stand, points a finger at the defendant, and says 'That's the one!'<sup>477</sup>

However, despite the frequency of its use, there is evidence that it can be erroneous. Sadly, Mr Beck's case was far from the last where eyewitness identification evidence has been found to be incorrect. As far back as 1972 the Criminal Law Revision Committee considering the issue of mistaken eyewitness identifications and noted that it was '...by far the greatest cause of actual or possible wrong convictions. Several cases have occurred in recent years,...when a person has been charged or convicted on what has later been shown beyond doubt to have been mistaken identification.'<sup>478</sup> More recently, Gross et al. reported that mistaken eyewitness testimony was the most common cause of wrongful conviction and imprisonment in the US.<sup>479</sup>

An important early attempt to address issues of misidentification was the Devlin Committee<sup>480</sup> which was set up in 1974 to review 'all aspects of the law and procedure relating to evidence of identification in criminal cases'<sup>481</sup> following a number of wrongful convictions.

In addition to recommendations around the standardisation of identification parades,<sup>482</sup> and welcoming the additional focus placed on identification evidence in the judges' summing up,<sup>483</sup> the committee made this, arguably radical for the time, recommendation:

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<sup>477</sup> *Watkins v Sowders*, 449 US 341 (1981) at 352

<sup>478</sup> Criminal Law Revision Committee, Eleventh Report: Evidence (General), Cmnd 4991 (HMSO London, 1972), 196

<sup>479</sup> SR Gross, K Jacoby, DJ Matheson and N Montgomery 'Exonerations in the United States 1989 through 2003' (2005) 95 *Journal of Criminal Law and Criminology* 523, 542

<sup>480</sup> House of Commons *Report to the Secretary of State for the Home Department of the Departmental Committee on Evidence of Identification in Criminal Cases* (Devlin Committee), Cmnd 338 (HMSO London, 1976)

<sup>481</sup> *ibid* Terms of Reference p. vii

<sup>482</sup> *ibid* 8.13

<sup>483</sup> *ibid* 8.6

Research should be directed to establishing ways in which the insights of psychology can be brought to bear on the conduct of identification parades and the practice of the courts. In particular, research should proceed as rapidly as possible into the practicability of voice identification parades with the use of tape recorders or any appropriate aids.<sup>484</sup>

The use of psychological research in support of safe and effective identification evidence is a theme to which we shall return shortly.

It is important to both note and acknowledge that incorrect eyewitness identification evidence is most often the result of a genuine mistake on the part of the witness, only rarely is the misidentification malicious. The eyewitness is giving honestly held testimony in the belief that they are correctly identifying the individual and thus supporting the delivery of justice. Given that incorrect eyewitness identification evidence does frequently still come before the courts, could expert testimony aid the jury in exposing or understanding it?

The leading case in English law is *R v Turnbull*<sup>485</sup> in which a five-judge Court of Appeal gave particular attention to assessing the quality of the identification. The court said:

In our judgement when the quality is good as for example when the identification is made after a long period of observation, or in satisfactory conditions by a relative, a neighbour, a close friend, a workmate and the like, the Jury can safely be left to assess the value of the identifying evidence even though there is no other evidence to support it.<sup>486</sup>

However, the court went on to consider the situation with regard to cases where the evidence is of poorer quality:

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<sup>484</sup> *ibid* 8.1

<sup>485</sup> *R v Turnbull* [1977] QB 244

<sup>486</sup> *ibid* 138



When, ..., the quality of the identifying evidence is poor, as for example when it depends solely on a fleeting glance or on a longer observation made in difficult conditions, the situation is very different. The judge should then withdraw the case from the jury and direct an acquittal unless there is other evidence which goes to support the correctness of the identification.<sup>487</sup>

The *Turnbull* guidelines as set out by the Court of Appeal, and as subsequently set out in published guidance produced for the judiciary,<sup>488</sup> can be viewed as an example of group character evidence,<sup>489</sup> with the evidence being presented through judicial instruction rather than being given by an expert witness. *Turnbull* is guidance that judges must give to any jury in a case where the case rests largely or exclusively on eyewitness (and earwitness) testimony. The adequacy or otherwise of the *Turnbull* guideline in this respect will be considered in section 6.4 of this thesis.

While the *Turnbull* guidelines offer some 'expert guidance' via the group character principle, the admissibility of expert evidence *per se* with regard to eyewitness testimony has not yet been considered in this jurisdiction. However, the Scottish Appeal Court of the High Court of Justiciary considered the issue in *Gage v HM Advocate*,<sup>490</sup> Roberts<sup>491</sup> believes that the conclusions from that ruling may give an indication of how such evidence would be addressed within this jurisdiction.

The appellant sought to introduce new evidence at appeal from a professor of psychology attesting as to the factors that would make the eyewitness identification

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<sup>487</sup> *ibid* 139; for a recent example of a weak visual ID saved by strong supporting evidence, see *R v Gray* [2018] EWCA Crim 2083

<sup>488</sup> Judicial College *Crown Court Compendium Part 1 2019* at 15.1

<sup>489</sup> RP Mosteller 'Syndromes and Politics in Criminal Trials and Evidence Law' (1996) 46 *Duke Law Journal* 461

<sup>490</sup> *Gage v HM Advocate* [2011] HCAJC 40

<sup>491</sup> A Roberts 'Case Comment – Expert evidence on the reliability of eyewitness identification – some observations on the justifications for exclusion: *Gage v HM Advocate*' (2012) 16 *International journal of Evidence and Proof* 93

evidence which was central to the original conviction unreliable. The court declined to admit the evidence on three grounds:

1. That expert evidence is not admissible unless it was necessary for the jury to reach a sound conclusion without it;<sup>492</sup>
2. That the reliability and credibility of the witnesses' evidence was a matter for the jury and that the court has sufficient safeguards to enable the jury to reach a just decision;<sup>493</sup>
3. That admitting such evidence could lead to rebuttal expert evidence and thus lengthen trials, this issue could also extend to trials under summary procedures.<sup>494</sup>

Taking the points in turn, the court rejected the appellant's argument that the proposed expert evidence should be admitted because it would be useful to the jury, citing the authority of *Turner*<sup>495</sup> and *Raghip*<sup>496</sup> that expert evidence is only admissible 'if it is necessary for the proper resolution of the dispute'.<sup>497</sup> The court drew a clear distinction between mere *usefulness* and *necessity*, citing Lawton LJ that 'if on the proven facts a judge or jury can form their own conclusions without help, then the opinion of an expert is unnecessary.'<sup>498</sup>

It is worth at this point exploring in more detail where the threshold between 'helpful' and 'necessary' lies. Returning to LC325, the proposed codification of the *Turner* test notes that expert evidence is likely to be admissible if it is likely to be 'outside the judge's or jury's experience or knowledge and would give them help in arriving at their conclusions.'<sup>499</sup> It seems the key point to note is that this proposed codification makes no reference to the principle of necessity, and even in their everyday use *helpfulness*

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<sup>492</sup> *Gage v HM Advocate* [2011] HCAJC 40 [22]

<sup>493</sup> *ibid* [28]

<sup>494</sup> *ibid* [32]- [33]

<sup>495</sup> *R v Turner* [1975] QB 834

<sup>496</sup> *R v Raghip* The Times 9 Dec 1991

<sup>497</sup> *Gage v HM Advocate* [2011] HCAJC 40 [22]

<sup>498</sup> *R v Turner* [1975] QB 834 at 841

<sup>499</sup> Draft Criminal Evidence (Experts) Bill 1(1)(a)

and *necessity* are two very different beasts. The notion of helpfulness was previously explored in the Canadian case *R v Mohan*,<sup>500</sup> wherein the Canadian Supreme Court held that helpfulness was too low for the threshold of admissibility, and like *Gage* held that necessity was the appropriate threshold, but with Sopinka J noting 'I would not judge necessity by too strict a standard.'<sup>501</sup> As such it seems fair to say that there is some dispute as to the appropriate threshold and the question as to whether or not a jury can form their conclusion without expert help is a point to which we shall return shortly.

With regard to the second point, in 1976 Lord Devlin acknowledged the limitations of this approach:

The problem peculiar to identification is that the value of the evidence...is exceptionally difficult to assess. The weapon of cross-examination is blunted. A witness says he recognises the man, and that is that or almost that. There is no story to be dissected, just a simple assertion to be accepted or rejected. If a witness thinks that he has a good memory for faces when in fact he has a poor one, there is no way of detecting the failing.<sup>502</sup>

One could question some elements of this statement in that, potentially, the witness having poor eyesight or being a long distance away is part of the story to be dissected, and such considerations are built into the current *Turnbull* direction.<sup>503</sup> The safeguards built in by *Turnbull* would, it may be argued, address these points as they have the effect that a jury may be invited to convict on the basis of either:

- Apparently good/strong identification evidence, or

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<sup>500</sup> *R v Mohan* [1994] 2 SCR 9

<sup>501</sup> *ibid* 23

<sup>502</sup> House of Commons *Report to the Secretary of State for the Home Department of the Departmental Committee on Evidence of Identification in Criminal Cases* (Devlin Committee), Cmnd 338 (HMSO London, 1976) at 1.24

<sup>503</sup> Judicial College *Crown Court Compendium part 1* (July 2019) 15-1 to 15-3

- Weaker or fleeting identification evidence that is supported by other incriminating evidence.

But the judge must withdraw the case from the jury if the identification evidence is weak and there is little/no other supporting incriminating evidence.<sup>504</sup>

From this, it is arguable that a possible role for expert evidence would be to indicate the strength or otherwise of the identification evidence, noting the potential difficulty of marshalling such evidence, while ensuring it stops short of telling the court if the eyewitness should be believed or not. Whether that could be achieved via a modified *Turnbull* direction, or whether it requires expert testimony on a case-by-case basis, is something that will be considered shortly.

The judgment in *Gage* notes that to ensure that the jury place the evidence in the correct context and attribute appropriate weight, a judicial direction as to the eyewitness testimony will give ‘the jury a specific and thorough direction that warns them that in certain circumstances such evidence may be unreliable and... specific considerations that might ... affect the reliability of an identification made by an eyewitness.’<sup>505</sup> The court further expressed concern that the presence of expert testimony could be such that the probative value was outweighed by its prejudicial effect. Roberts<sup>506</sup> takes the view that the availability of such safeguards are ‘a far from compelling justification for the exclusion of expert evidence’ while acknowledging the concern with regard to the probative value.

Finally the third, and possibly most straightforward point, which echoes that in England. Approximately 95% of cases are disposed of via sheriff or justice alone courts; as such this concern is, as the court acknowledges, essentially practical and arguably a reflection of public policy with regards to ensuring that the court system continues to

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<sup>504</sup> *R v Turnbull* [1977] QB 244

<sup>505</sup> *Gage v HM Advocate* [2011] HCAJC 40 [29]

<sup>506</sup> A Roberts ‘Case Comment - Expert evidence on the reliability of eyewitness identification – some observations on the justifications for exclusion: *Gage v HM Advocate*’ (2012) 16 *International Journal of Evidence and Proof* 93

function and that additional strains and expense are not incurred. Similar concerns have been raised in respect of polygraph evidence in some jurisdictions, this will be examined in some detail in the next chapter.

Although the exception, there are examples of common law jurisdictions admitting expert testimony with regard to eyewitness identification. Roberts<sup>507</sup> examines the Australian case *R v Forbes*<sup>508</sup> in which a single judge hearing the case without a jury admitted the evidence of an expert psychologist specialising in visual face recognition, the expert did not give evidence as to the specific identification, but rather as to the factors influencing the accuracy of identification evidence in general. Gray J noted that he found this evidence helpful.<sup>509</sup> Part of the evidence related to the research concerning the 'forgetting curve' highlighting the fact that most forgetting happens soon after the event, and then memory loss slows down.<sup>510</sup>

As with English courts, the Australian courts are required to advise the jury of factors which can make eyewitness identification evidence unreliable, with the Evidence Act s165(2) noting that:

If there is a jury and a party so requests, the judge is to:

- (a) warn the jury that the evidence may be unreliable; and
- (b) inform the jury of matters that may cause it to be unreliable; and
- (c) warn the jury of the need for caution in determining whether to accept the evidence and the weight to be given to it.<sup>511</sup>

It is important to note the difference here between eyewitness visual identification and facial mapping. Facial mapping, whereby measurements of the distance between key features on the face are taken from CCTV or security camera footage and

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<sup>507</sup> A Roberts 'Case Comment Eyewitness identification and expert insight: *R v Forbes*' (2010) 14 *International Journal of Evidence and Proof* 57

<sup>508</sup> *R v Forbes* [2009] ACTSC 1 (Sup Ct (ACT)(Full Ct))

<sup>509</sup> *ibid* [35]

<sup>510</sup> *ibid* [45]

<sup>511</sup> Evidence Act (1995) is a Federal Act, but the majority of States have equivalent legislation

compared with those of the defendant's photograph taken at the time of arrest, has been adduced on numerous occasions.<sup>512</sup> Hodgkinson and James note that this technique 'amounts to a more sophisticated attempt to do what an ordinary eye-witness does when making a visual identification'.<sup>513</sup> Arguably, it also has the advantage of invariably having actual images of the offender to compare with the accused.

### 6.1.2 What does the Research Indicate?

Returning to the previously noted Devlin Report, consideration was given to the then current research regarding the psychology of memory and recall<sup>514</sup> and the report noted that this highlighted the 'general inadequacy of the average man's powers of memory.'<sup>515</sup> The topic of eyewitness identification and factors which impact its accuracy are, according to Redmayne writing in 2001, one of the most researched psycho-legal topics with more than 2,000 relevant books and articles at that time.<sup>516</sup>

It is helpful at this point to briefly consider how memory works. Memory is not akin to a recording whereby the recording is made and (barring the destruction of the tape/disc) remains fixed and immutable. Memory, on the contrary, is reconstructive, and the reconstructed memory is based on the stored remnants of the original experience with schema-driven information making that memory coherent.<sup>517</sup> Current theory also asserts that memory is malleable, so each time a memory is reconstructed, it changes.<sup>518</sup> This is not about deception on the part of the individual doing the

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<sup>512</sup> *Attorney General's Ref No.2 of 2002* [2003] 1 Cr App R 21; *R v Clarke* (1995) 2 Cr App R 425; *R v Stockwell* (1993) 97 Cr App R 260; *R v Hookway* [1999] Crim LR 750

<sup>513</sup> T Hodgkinson and M James (2015) *Expert Evidence: Law and Practice* (Fourth Edition Sweet and Maxwell 2015), 17-008

<sup>514</sup> It should be noted that issues of memory and recall impact all forms of evidence, not just issues of identification

<sup>515</sup><sup>515</sup> House of Commons *Report to the Secretary of State for the Home Department of the Departmental Committee on Evidence of Identification in Criminal Cases* (Devlin Committee), Cmnd 338 (HMSO London, 1976) at 4.12

<sup>516</sup> M Redmayne *Expert Evidence and Criminal Justice* (Oxford University Press 2001), 187

<sup>517</sup> Schema in this context is the cognitive framework through which an individual makes sense of the world and new information

<sup>518</sup> ML Howe, LM Knott and MA Conway *Memory and Miscarriages of Justice* (Routledge Oxon 2018), 1 and 63-64

remembering, this is biological and chemical processes, which are still not fully understood, at work.

While this is the current science of memory, the understanding of the public, and thus potential jurors, is substantially different. Simons and Chabris<sup>519</sup> surveyed 1,500 members of the public with regard to aspects of memory. Some 47% of the sample agreed that a memory, once formed, did not change, but of 89 memory experts asked the same question, none agreed with the statement.

Other examples of naive beliefs about accuracy of memory which present a challenge to the courts is the inaccurate perception that detailed accounts are more believable than less detailed ones. Howe et al. cite research which indicates that this perception is held by both laypeople<sup>520</sup> and legal professionals,<sup>521</sup> further noting that false not true memories are the ones that tend to have the richest detail.<sup>522</sup>

Desmarais and Read<sup>523</sup> undertook a meta-analysis of 23 surveys regarding the level of knowledge of the general public about elements that may affect the reliability of eyewitness evidence. The authors took as the base for their analysis the work of Kassein et al.<sup>524</sup> wherein 16 distinct areas of knowledge relating to eyewitness evidence had been identified as being sufficiently reliable to present in court by a

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<sup>519</sup> DJ Simons and CF Chabris 'What People Believe About How Memory Works: A Representative Survey of the U.S. Population' (2011) *PLoS ONE* 6(8), e22757

<sup>520</sup> S Magnussen, RA Wise, AQ Raja, MA Safer, N Pawlenko and U Stridbeck 'What Judges Know About Eyewitness Testimony: A Comparison of Norwegian and US judges' (2008) 14 *Psychology, Crime and Law* 177

<sup>521</sup> RA Wise and MA Safer 'What US Judges Know and Believe About Eyewitness Testimony' (2004) 18 *Applied Cognitive Psychology* 427

<sup>522</sup> ML Howe, LM Knott and MA Conway *Memory and Miscarriages of Justice* (Routledge Oxon 2018), 40

<sup>523</sup> SL Desmarais and JD Read 'After 30 Years, What Do We Know About What Jurors Know? A Meta-Analytic Review of Lay knowledge Regarding Eyewitness Factors' (2011) 35 *Law and Human Behavior* 200. It should be noted of the 23 surveys 3 were undertaken in the UK, 11 in the USA, 7 in Canada and 2 in Australia

<sup>524</sup> SM Kassein, VA Tubb, HM Harmon and A Memon 'On the 'General Acceptance' of Eyewitness Testimony Research: A New Survey of the Experts' (2001) 56 *American Psychologist* 405. The 16 topics and the statements against which the judgment of reliability was made is given in Table 1.

group of 64 psychologists. In this study the definition for 'sufficiently reliable' was that at least 80% of the 64 psychologists were in agreement with the given statement.

The results were further divided into system and estimator variables, defined as:

- System variables are those elements which are within the control of the criminal justice system, for example how the questions are worded;
- Estimator variables are those elements over which the criminal justice system has no control, for example how long the witness actually observed the individual at the time they saw them.

The meta-analysis, while utilising the 16 statements, was not looking for consensus among experts, but was determining the extent to which expert opinion and the opinion of laypeople, and thus potential jurors, was in accordance. The results are given in Table 1.



Table 1

	Area of knowledge	Statement upon which at least 80% of experts are in agreement	Percentage of Lay respondents in agreement with statement
<b>Overall percentage agreement with expert opinion for system variables 71%</b>			
1	Wording of questions	An eyewitness' testimony about an event can be affected by how the questions put to that witness are worded.	87%
2	Confidence malleability	An eyewitness' confidence can be influenced by factors that are unrelated to identification accuracy.	81%
3	Line-up instructions	Police instructions can affect an eyewitness' willingness to make an identification.	75%
4	Mugshot-induced bias	Exposure to mugshots of a suspect increases the likelihood that the witness will later choose that suspect in a line up.	65%
5	Presentation format	Witnesses are more likely to misidentify someone by making a relative judgment when presented with a simultaneous (as opposed to sequential) line-up.	49%
<b>Overall percentage agreement with expert opinion for estimator variables 67%</b>			
6	Alcoholic intoxication	Alcoholic intoxication impairs an eyewitness' later ability to recall persons and events.	92%
7	Attitudes and expectations	An eyewitness' perception and memory for an event may be affected by his or her attitudes and expectations.	88%
8	Child suggestibility	Young children are more vulnerable than adults to interviewer suggestion, peer pressure, and other social influences.	75%
9	Post-event information	Eyewitness testimony about an event often reflects not only what they saw but the information they obtain later.	74%
10	Unconscious transference	Eyewitnesses sometimes identify as a culprit someone they have seen in another situation or context.	69%
11	Exposure time	The less time an eyewitness has to observe an event, the less well he or she will remember it.	65%
12	Forgetting curve	The rate of memory loss for an event is greatest right after the event and levels off over time.	61%
13	Cross race bias	Eyewitnesses are more accurate when identifying members of their own race than members of other races.	57%
14	Hypnotic suggestibility	Hypnosis increases the suggestibility to leading or misleading questions.	53%
15	Weapon focus	The presence of a weapon impairs the accuracy of eyewitness testimony.	52%
16	Accuracy confidence	An eyewitness' confidence is not a good predictor of his or her identification accuracy.	51%

Considering the issue of admissibility, Desmaris and Read ask the question which of the topics are 'beyond the ken' of potential jurors? If the level of concordance being sought is, as per Kassein et al. 80%, then there are only 4 of the 16 topics where the potential jurors and the experts are in agreement, (No. 1, 2, 6 and 7 in table 1) which it could be argued supports the notion that expert evidence in relation to the other 12 should not be rejected out of hand.

Perhaps more concerning are those elements where the potential jurors showed a wide disparity with expert opinion, such that agreement was around 50%, then there are still five topics where the meta-analysis indicates that the study subjects had poor understanding of those elements. These were weapon focus (52%) accuracy–confidence (51%), hypnotic suggestibility (53%), confidence malleability (51%), and presentation format (49%).

More recently Houston et al.<sup>525</sup> explored this issue further in two recent studies with Scottish jurors and judges. This research is different in that it assesses the knowledge of both judges and potential jurors from the same population. In the first study, 99 judges participated and the finding was that the highest level of consistency with expert opinion related to alcoholic intoxication of the witness at the time of the crime (97%) and post-event information (91%); the lowest correlation with expert opinion was in exposure duration,<sup>526</sup> weapon focus, and mugshot bias with less than 50% consistency.

In the second study, 192 members of the public (potential jurors) demonstrated 61% consistency with expert opinion. This figure is well below the overall 67% reported by

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<sup>525</sup> KA Houston, L Hope, A Memon and DJ Read 'Expert Testimony on Eyewitness Evidence: In Search of Common Sense' (2013) 31 *Behavioral Sciences and the Law* 637. The two studies are considered within this single paper.

<sup>526</sup> Exposure time – the less time an eyewitness has to observe an event the less well he or she will remember it; Weapon focus – The presence of a weapon impairs an eyewitnesses ability to accurately identify the perpetrators face; Mugshot bias – exposure to mugshots of a suspect increases the likelihood that the witness will later choose that suspect in a lineup –definition from S Kassin, VA Tubb, HM Hosch and A Memon (2001) 'On the "General Acceptance" of Eyewitness Testimony Research' (2001) 56 *American Psychologist* 405, 408

the Demarais and Read study noted previously. It is important to note that this survey generated responses in two formats; the first was the use of multi-choice questions (MCQ), the second was the use of response generation (RG) questionnaires. In the latter the respondent generates their own response rather than selecting from a pre-populated list as with MCQ. There are distinct differences in the responses between the two formats. For judges, the highest level of correlation with the expert opinion was in relation to alcohol intoxication, with 91.7% of MCQ responses consistent with the expert opinion while 68.8% of RG responses were consistent. With the MCQ group, 3 of the 11 measured criterion fell below 50% consistency with the expert opinion, and for the RG group 5 of the 11 criterion were below 50%. The authors conclude that there may be a place in the legal system for researchers to present scientific findings to the courts in order to assist with the training of the judiciary, and also to present this evidence to the jury.

A recent study looking at the understanding of police, memory experts, and members of the public<sup>527</sup> replicated many of the findings of the earlier studies and classified the results by identifying two memory belief systems. The system held predominately by the general public and the police (non-experts) was designated the common sense memory belief system (CSMBS) and the other, the scientific memory system (SMS) was held predominately by the memory experts.

Mirroring earlier findings, the researchers concluded that beliefs that made up the CSMBS were contradicted by the SMS, therefore raising the possibility that because of the faulty beliefs there could be major errors when it came to assessing memory evidence.

As with any research, further research is always possible, however juries in criminal trials are generally required to reach their verdict 'beyond reasonable doubt',<sup>528</sup> and

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<sup>527</sup> S Akhtar, LV Justice, L Knott, F Kibowski and MA Conway 'The 'Common Sense' Memory Belief System and its Implications' (2018) 22 *International Journal of Evidence and Proof* 289

<sup>528</sup> Exceptions would include cases where 'Not guilty by reason of insanity' is argued where it is for the defence to prove and the proof is on the balance of probabilities

yet current research demonstrates that in a number of categories there is a wide disparity with expert opinion. How is it then possible to argue that conclusions as to the reliability of the evidence and thus the finding of guilt or otherwise is based on a sound understanding of the evidence? This concern here is raised in respect of eyewitness testimony, but it is argued that the same concerns exist in relation to other forms of evidence.

Interestingly, the issue of the state of psychological research relating to eyewitness identification was explored in depth by the Supreme Court of New Jersey in the case *State v Henderson*.<sup>529</sup> The court appointed a special master who presided over an evaluation of the scientific and other evidence relating to eyewitness identification, considering hundreds of studies and testimony from seven experts. Commenting on the report generated the court noted that:

We are convinced from the scientific evidence in the record that memory is malleable, and that an array of variables can affect and dilute memory and lead to misidentifications. These factors include system variables like line-up procedures, which are within the control of the criminal justice system, and estimator variables like the lighting conditions or the presence of a weapon, over which the legal system has no control... we conclude that the current standard for assessing eyewitness identification evidence does not fully meet its goals...It also over states the jury's inherent ability to evaluate evidence offered by eyewitnesses who honestly believe their testimony is accurate.<sup>530</sup>

A number of recommendations came out in this report the majority of which were adopted by the New Jersey courts. This included revision to the model jury charge, the equivalent of the *Turnbull* direction, which will be considered shortly.

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<sup>529</sup> *State v Henderson* 27 A3d 872 (NJ 2011)

<sup>530</sup> *ibid* 878

### **6.1.3 Can a Case be made for the Admission of Expert Evidence as to Eyewitness Identification Evidence?**

As noted in Chapter 4, the Law Commission in its review took the decision that the *Turner* principle did not require review, and chose to focus on ensuring the reliability of expert evidence to be presented to the courts. As such, while the research into the reliability of eyewitness identification appears likely to meet the requirements of the reliability test set out in the CrimPR, the authority of *Gage* is that the evidence fails on the basis of the *Turner* principle, in that it is deemed not be a necessity.

The range of studies considered here, and the fact that flawed eyewitness identification is the most common form of miscarriage of justice, make it seem a little disingenuous to argue that, as per *Turner*, expert testimony in respect of the research underpinning eyewitness testimony cannot be regarded as necessary, rather than merely useful and therefore inadmissible as per *Gage*. The issue of the divergence between the ‘common sense’ understanding of the evidence and the ‘scientific’ understanding of the evidence may mean that not only do the jury not have a full understanding of the relevant factors, they do not even realise they may have possibly gaping lacunae in their knowledge.

In the case of expert testimony, the expert evidence would not be used to challenge the credibility of the witness; as such there is arguably no concern that the expert would be replacing the jury as the ‘lie detector’. Rather, by highlighting the research into this subject the expert would be providing the information the jury requires to fully weigh the evidence that has been presented. It is important to recall that eyewitness testimony can, in some cases, be the only evidence that comes before the courts and noting that the weight of such evidence can be pivotal in a case. That being so – and acknowledging that in a number of critical areas there is wide disparity between what the research indicates to be the truth, and what members of the public accept as being the case – how can the argument be supported that expert evidence to highlight these disparities, and thus allow the jury to reach a reasoned verdict, is merely useful rather

than a necessity? Of course, such a change could then open the way to other concerns such as not slipping into oath helping.

The possibility of utilising the expert evidence to improve the utility of the *Turnbull* direction will be considered shortly.

## **6.2 Earwitness Identification Evidence**

Voice identification or earwitness evidence is utilised less often than eyewitness testimony, however the effect of incorrect identification is no less damaging. Sherrin<sup>531</sup> identified 17 individuals in the US who were wrongly convicted, based at least in part on incorrect voice identification evidence, noting that in five of these cases the voice identification was central to the case. In this jurisdiction, Smith and Braber identify two cases where convictions were quashed in which voice identification played a role.<sup>532</sup>

### **6.2.1 Forms of Earwitness Identification Evidence – Lay and Expert Evidence**

Voice identification testimony can come before the courts in either the form of lay witness identification, which may or may not have supporting expert testimony, or in the form of expert evidence. As such it is immediately apparent that there are differences in the treatment of eye and earwitness evidence, in that it must be assumed that earwitness evidence can and does meet the *Turner* threshold to permit the admission of expert evidence. The question which must then logically follow is, does this difference in the treatment of the two forms of identification evidence support the process of truth seeking?

The rationale underpinning this ‘mixed economy’ was set out in *R v Hersey* in 1998 wherein the Court of Appeal said:

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<sup>531</sup> C Sherrin ‘Earwitness Evidence: The Reliability of Voice Identifications’ (2015) 52 *Osgoode Hall Law Journal* 819

<sup>532</sup> H Smith and N Braber ‘Improving the accuracy and reliability of earwitness evidence’ (2018) <http://www.empac.org.uk/improving-accuracy-reliability-earwitness-evidence/> accessed 18/03/19. Listed cases are *R v R* (2000) Crim LR 183 (written as *Robert* (2000) on the EMPAC website) and *R v Nealon* [2014] EWCA Crim 574 in both cases, from the case reporting the role of voice identification appears to have been relatively minor.

As a matter of generality, in cases of voice identification there will undoubtedly be cases calling for the assistance of an expert and others in which the issues are within the competence of the jury. It was important there should not be a proliferation of expert evidence ... it was in each case for the judge to decide if the issue was one on which the jury could be assisted by an expert.<sup>533</sup>

The lay testimony can be either jury identification whereby the jury are asked to compare a recording of the probable offender with the voice of the accused individual, or it may be a witness who heard/overheard the alleged offender's voice and has been asked to pick this out in a voice line-up.

Expert evidence relating to eyewitness identification evidence as has been demonstrated is generally inadmissible on the basis of the *Turner* test.<sup>534</sup> The situation with regard to voice identification/earwitness identification evidence is substantially different, in that the case law clearly shows that expert evidence regarding voice identification evidence has been successfully adduced for a number of years.

Thus, while expert testimony with regard to voice identification is admissible, it is not always adduced in the cases of either jury voice identification, or in the case of laywitness voice identification testimony. This section will argue firstly that the failure to access expert testimony in respect of laywitness voice identification may inhibit the ability of the jury to reach a rational decision. The argument will then be made that the approach with regard to expert testimony taken within this jurisdiction is irrational and does not support the truth seeking process.

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<sup>533</sup> *R v Hersey* [1998] Crim LR 281 at 282

<sup>534</sup> It should be noted that such inadmissibility relates to direct eyewitness identification, expert testimony is admissible with regard to facial mapping.

### 6.2.1.1 What is the Evidence Regarding the Reliability of Lay Earwitness Testimony?

As noted above, lay earwitness identification may take the form of either:

- A) the jury being asked to compare a voice with a recording and being asked to carry out a comparison, or;
- B) a laywitness giving testimony as to a voice or conversation they have heard and attributing that voice to a given individual

Unfortunately, the author has been unable to locate a similar analysis of the research in relation to the factors and understanding of earwitness testimony to that set out in Table 1 at 6.1.2 with regard to eyewitness testimony. Nonetheless there is a considerable and evolving body of research relating to this area.

Research indicates that auditory memory is generally inferior to visual memory,<sup>535</sup> McGorrery and McMahon<sup>536</sup> note that the reason for this is unclear, although it is possibly because of the more complex nature of auditory information, or may be because of different neural pathways being involved in the process of auditory as against visual information.

Sherrin provides an overview of some of the applicable psychological research regarding the accuracy of voice identification, noting that while the majority of studies indicate poor rates of accuracy with regard to correct identification, there are some which appear to indicate that under the correct conditions much higher levels of successful identification can be achieved with relatively low levels of false identifications, but that typically the levels of successful identification are between 35-65% with false positive rates falling in a range between 20% and 40%.<sup>537</sup>

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<sup>535</sup> MA Cohen, TS Horowitz and JM Wolfe 'Auditory Recognition Memory is Inferior to Visual Recognition Memory' (2009) *106 Proceedings of the National Academy of Sciences of the United States of America* 6008

<sup>536</sup> PG McGorrery and M McMahon 'A Fair 'Hearing': Earwitness Identifications and Voice Identification Parades' (2017) *21 The International Journal of Evidence and Proof* 262

<sup>537</sup> C Sherrin 'Earwitness Evidence: The Reliability of Voice Identifications' (2015) *52 Osgoode Hall Law Journal* 819, 823-827



As with eyewitness identification, the variables which can impact the accuracy of voice identification can be categorised as either system or estimator variables (defined at 6.1.2). The list of factors which are identified as affecting voice comparison and recognition are, as might be expected, wide-ranging. There is a substantial body of research with regard to the factors which affect voice identification, and a full evaluation of the literature is beyond the remit of this thesis, consequently a review of the literature undertaken by Daniel Yarmey<sup>538</sup> in 1995 forms the basis of this review, with some elements of more recent literature included where appropriate. The following are some of the key estimator variables, but this list should not be regarded as exhaustive, and it should also be noted that some research bridges a number of the variables.

### ***Estimator Variables***

#### *Familiarity with the voice*

Yarmey,<sup>539</sup> in reviewing the then current studies, indicated a somewhat mixed picture with a number of studies indicating that an individual who is well known to the witness is more likely to be successfully identified than someone with whom the witness is less familiar or unknown. More recently, Yarmey et al.<sup>540</sup> demonstrated correct identifications as high as 95% when the individual was highly familiar, but false positive identifications as high as 45% when the individual was not known to the witness. If one is considering putting such evidence before the courts, a false positive rate as high as that is, at best, seriously disturbing.

#### *Exposure time*

Cook and Wilding<sup>541</sup> found that the length of the exposure to the target voice impacted recognition, with shorter exposures leading to lower levels of successful

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<sup>538</sup> AD Yarmey 'Earwitness Speaker Identification' (1995) 1 *Psychology, Public Policy and Law* 792

<sup>539</sup> *ibid* 796

<sup>540</sup> AD Yarmey, AL Yarmey, MJ Yarmey and L Parliament 'Commonsense Beliefs and the Identification of Familiar Voices' (2001) 15 *Applied Cognitive Psychology* 238

<sup>541</sup> S Cook and J Wilding 'Earwitness Testimony: Never Mind the Variety, Hear the Length' (1997) 11 *Applied Cognitive Psychology* 95

identification. This replicates the finding of Yarmey<sup>542</sup> in the earlier review of literature. If one then applies this to jury identification, there will have been a longer period of exposure, but also the risk of confirmation bias which will be considered shortly.

#### *Retention interval*

Yarmey notes that while there are a number of factors which affect retention, generally the research indicates that the longer the delay, the fewer identifications and the greater the possibility of false positives.<sup>543</sup> More recently, looking at multiple elements, Kerstolt et al.<sup>544</sup> undertook a study looking at the effects of accent, telephone, and longer retention periods (3-8 weeks) on identification. This also returned relatively low levels of successful identification of the target voice. The target voice was not present in all of the voice line-ups, and while 24% of the participants correctly identified the target voice when it was present, 50% identified the target voice as being present when it was not. Thus, as per Yarmey, false identification was an issue. The study found that where the target voice had a strong accent unfamiliar to the listener, correct identification was reduced. Ability to identify the target voice remained relatively stable over the one-, three-, or eight-week period.

#### *Listener confidence/confidence accuracy*

Yarmey,<sup>545</sup> in reviewing 11 research papers pre-1995, noted that earwitness confidence is an unreliable indicator of earwitness identification accuracy. McGorrery and McMahon note that as with visual identification there is no strong relationship between confidence and accuracy.<sup>546</sup> Once again, this disconnect between the

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<sup>542</sup> AD Yarmey 'Earwitness Speaker Identification' (1995) 1 *Psychology, Public Policy and Law* 792, 804

<sup>543</sup> *ibid* 805

<sup>544</sup> J H Kerstholt, NJM Jansen, AG Van Amelsvoort and APA Broeders 'Earwitnesses: Effects of Accent, Retention and Telephone' (2006) 20 *Applied Cognitive Psychology* 187

<sup>545</sup> AD Yarmey 'Earwitness Speaker Identification' (1995) 1 *Psychology, Public Policy and Law* 792, 802

<sup>546</sup> PG McGorrery and M McMahon 'A Fair 'Hearing': Earwitness Identifications and Voice Identification Parades' (2017) 21 *The International Journal of Evidence and Proof* 262, 266

common sense understanding and the expert understanding must be cause for concern.

### *Differences in voice*

One of the key differences between eye and earwitness identification is that a speaker's voice can be more readily disguised than can physical appearance. An individual's voice has a wide range of variation, they may be speaking more quickly/slowly/loudly/softly. Orchard and Yarmey,<sup>547</sup> writing in 1995, noted that voice disguise through whispering or via changes in tone between initial hearing and line-up influenced the accuracy of identification. They also found that the individuals within the test group overestimated the exposure duration to the voice, especially where the sample was short (30 seconds).

Öhman et al.<sup>548</sup> tested a group of children aged 11-13 (n=160) and adults (n=148) by exposing them to an unfamiliar voice for 40 seconds, either angry or normal, then testing the ability of both adults and children to correctly identify that individual in a voice line up either immediately after exposure to the test voice, or two weeks later. The listeners were informed that the target voice may or may not be present in the line-up, thus a comparable instruction to that given prior to voice identification parades by the police.<sup>549</sup> At best, 19% of the adults and 25% of the children correctly identified the test voice immediately after exposure; after two weeks this dropped with 14% of the adults and 9% of the children identifying the target voice correctly. Perhaps more worrying still was the number of false identifications which ranged between 41% and 59%.

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<sup>547</sup> TL Orchard and AD Yarmey 'The Effects of Whispers, Voice Sample Duration, and Voice Distinctiveness on Criminal Speaker Identification' (1995) 9 *Applied Cognitive Psychology* 249

<sup>548</sup> L Öhman, A Eriksson and PA Granhag 'Angry Voices from the Past and Present: Effects on Adults' and Children's Earwitness Memory' (2013) 10 *Journal of Investigative Psychology and Offender Profiling* 57

<sup>549</sup> Home Office Advice on the use of Voice Identification Parades *Home Office Circular 057/2003* at para 23

It is also perhaps unsurprising that there is greater success in identifying voices in familiar languages than unfamiliar ones.<sup>550</sup> Edmond et al.<sup>551</sup> also highlight the concerns where a jury is asked to undertake voice comparison where the voices are not in their native language. This issue was examined in the Australian case *R v Korgbara*<sup>552</sup> which is considered in 6.2.1.2.

### *The listener*

A range of personal characteristics can affect the ability of a witness to make an accurate voice identification. Hearing begins to decline from the age of about 40,<sup>553</sup> which has implications for both witnesses brought before the court, but also potentially for jurors asked to make comparisons in court. Vermeire et al.<sup>554</sup> note that even with only minimal hearing loss, older adults find it more difficult to understand speech in noise, which has clear implications where a witness has overheard a conversation against a noisy background. Robson and Smith note that there has been little discussion in the legal literature as to the impact of such personal characteristics when assessing evidence before the courts.<sup>555</sup>

### *Recording quality*

As is apparent from the case law, voice identification may require a judgment to be made on the basis of poor quality recordings, sometime gained covertly.<sup>556</sup>

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<sup>550</sup> AC Philippon, J Cherryman, R Bull and A Vrij 'Earwitness Identification Performance: The Effect of Language, Target, Deliberate Strategies and Indirect Measures' (2007) 21 *Applied Cognitive Psychology* 539

<sup>551</sup> G Edmond, K Martire and MS Roque 'Mere Guesswork': Cross-Lingual Voice Comparisons and the Jury' (2011) 33 *Sydney Law Review* 395

<sup>552</sup> *R v Korgbara* [2007] NSWCCA 84

<sup>553</sup> T Yamasoba, FR Lin, S Someya, A Kashio, T Sakamoto and K Kondo 'Current Concepts in Age-Related Hearing Loss: Epidemiology and Mechanistic Pathways' (2013) 303 *Hearing Research* 30

<sup>554</sup> K Vermeire, A Knoop, C Boel, S Auwers, L Schnus, M Talaveron-Rodriguez, C De Boom and M De Sloovere 'Speech Recognition in Noise by Younger and Older Adults: Effects of Age, Hearing Loss and Temporal Resolution' (2016) 125 *Annals of Otolaryngology, Rhinology and Laryngology* 297

<sup>555</sup> J Robson and H Smith 'Can We Have Faith Jurors Listen Without Prejudice?: Likely Sources of Inaccuracy in Voice-Comparison Exercises (2019) 2 *Criminal Law Review* 115, 123

<sup>556</sup> *R v Chenia* [2002] EWCA Crim 2345

### ***System variables***

The system variables are those over which the criminal justice system and the courts do have control. Robson and Smith<sup>557</sup> identify the following as system variables:

#### *Sequencing of playback*

Unlike eyewitness parades, the voice parade has to be sequential. So, while this element is under the control of the operator, the options are more limited.

#### *Gap in time between two samples*

A number of studies indicate that auditory information is retained as a sensory memory for a matter of seconds after exposure.<sup>558</sup> Robson and Smith note that on the basis of current knowledge, the jury and presumably a witness undertaking a voice line up should hear the voices in immediate succession. The guidance as to the conduct of a voice identification procedure states only that the witness may listen to the voice samples as often as they wish,<sup>559</sup> but gives no guidance as to the time between samples.

#### *Acoustics of the courtroom*

The Old Bailey has been in its current location for more than 350 years.<sup>560</sup> While much of the courts' estate is a great deal newer than this, it is fair to say that few of the current courts will have been constructed with acoustics as a primary concern. Mulcahy notes that the design of these buildings are the result of competing factors,<sup>561</sup> of which the acoustics are just one minor part. However, one of the primary functions

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<sup>557</sup> Robson J and Smith H 'Can We Have Faith Jurors Listen Without Prejudice?: Likely Sources of Inaccuracy in Voice-Comparison Exercises (2019) 2 *Criminal Law Review* 115, 127-129

<sup>558</sup> M Sams, R Hari, J Rif and J Knuutila 'The Human Auditory Sensory Memory Trace Persists about 10 sec: Neuromagnetic Evidence' (1993) 5 *Journal of Cognitive Neuroscience* 363; Z Lu and G Sperling 'Measuring Sensory Memory: Magnetoencephalography Habituation and Psychophysics' 319- 342 in *Magnetic Source Imaging of the Human Brain* edited by Z Lu and L Kaufmann (First Edition Taylor and Francis New York, 2003)

<sup>559</sup> Home Office 'Advice on the use of Voice identification parades' *Home Office Circular 057/2003* at para 25

<sup>560</sup> History of the Old Bailey Courthouse <https://www.oldbaileyonline.org/static/The-old-bailey.jsp> accessed 19/03/19

<sup>561</sup> L Mulcahy 'Architects of Justice: The Politics of Courtroom Design' (2007) 16 *Social and Legal Studies* 383

of a courtroom is to facilitate speech. The issue of poor acoustics is not just limited to the UK, a study of 29 courtrooms in Portugal found that the majority did not have the best acoustics for their designed function of speech.<sup>562</sup>

Noting this, it is encouraging that a Court and Tribunal Design Guide has recently been published which does make clear the need for both appropriate acoustics and the need for accessible hearing loops.<sup>563</sup> Whilst the guide appears very prescriptive it does appear that the 'usability' of the estate is being prioritised in the case of either new build or upgrading existing facilities, although given current funding constraints it seems unlikely that this will result in rapid improvement to the current situation.

Robson and Smith note that for lay listeners the acoustics of the room and the noise from the environment are likely to make the task of voice matching even more challenging, and noting the earlier comments regarding hearing loss in jurors over the age of 40, it seems this will impact further.

### *Bias*

An immediate concern with regard to bias, particularly for court identifications is the risk that if the jury are asked, as they were in *R v Kapikanya*<sup>564</sup> to compare an audio recording with the voice of the defendant there must be a risk of confirmation bias, in that the jury may assume that the accused would not be in court if the evidence was not sound. In much research there is the possibility that the target voice may be absent from the test line up, this is unlikely to be the case in court.

For identifications which are carried out as part of a voice parade PACE Code D<sup>565</sup> witnesses are advised that the perpetrator may, or may not be present. This applies

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<sup>562</sup> A Carvalho and C Monteiro 'Acoustics of Courtrooms in Portugal' NOISE-CON 2003 <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1010.7983&rep=rep1&type=pdf> accessed 19/03/19

<sup>563</sup> HM Courts & Tribunals Service *Court and Tribunal Design Guide Public Version 1.1* (Feb 2019)

<sup>564</sup> *R v Kapikanya* [2015] EWCA Crim 1507

<sup>565</sup> PACE Code D Annex A para 11

equally to eyewitness identity parades and has been shown (in the case of eyewitness parades) to reduce the number of false positive identifications.<sup>566</sup> Robson and Smith note the need for further research in this area.

#### **6.2.1.2 Case law – Lay Earwitness Testimony**

Laywitness voice identification and voice identification by the jury both occur within this jurisdiction, both with and without expert evidence. There is a body of applicable case law which considers the issues raised by both of these types of voice identification.

Looking first at jury identification, in *R v Kapikanya* the jury was asked by the defence to compare the voice on a good quality recording of a telephone conversation with that of one of the defendants. At appeal, one of the grounds was that:

The jury should have been directed:

(ii) Not to attempt a voice identification of the appellant [Kapikanya];  
alternatively

(iii) Adequately as to the special danger and difficulty of voice identification by the jury unassisted by expert or lay listener evidence or recognition evidence.<sup>567</sup>

The appeal failed on both grounds, with the Court of Appeal accepting that while the trial judge's summing up could have been more emphatic in his warning to the jury of the need for caution, this was not a serious shortcoming.<sup>568</sup> The Court of Appeal also determined that the trial judge had not erred in allowing the jury to consider the

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<sup>566</sup> RS Malpass and PG Devine 'Eyewitness Identification: Lineup Instructions and the Absence of the Offender' (1981) 66 *Journal of Applied Psychology* 482

<sup>567</sup> *R v Kapikanya* [2015] EWCA Crim 1507 [37]

<sup>568</sup> *ibid* [57]

recording to determine if they recognised the voice as belonging to the accused individual.<sup>569</sup>

It should be noted that in reaching this conclusion the court did emphasise that there were three special features in this case which made it unusual:

- The prosecution did not seek to rely on the evidence
- The recording was of good quality and significant length
- The jury made the comparison immediately after listening to the defendant giving testimony for several days.<sup>570</sup>

In reaching this outcome, the Court of Appeal considered the earlier authorities of *R v Chenia*<sup>571</sup> and *R v Flynn and St John*.<sup>572</sup> At first instance in *Chenia* the jury were directed that they could use their own judgment in relation to the voice captured on a number of poor quality surveillance tapes. At appeal, Clarke LJ, made the following statement with regard to the jury assessment of voice identification:

We have reached the conclusion that, on the particular facts of this case, where the jury were unassisted by expert evidence, they should have been warned that they should not compare one voice with another by comparing the characteristics of each because of the dangers of doing so.<sup>573</sup>

However, this judgment was considered in *Flynn and St John* and the Court of Appeal determined that this element of the judgment in *Chenia* was unsupported by other authority.<sup>574</sup> It should also be noted that one of the key distinguishing features of the recording in *Kapikanya* was that the recording, unlike *Chenia*, was of good quality.

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<sup>569</sup> *ibid* [60]

<sup>570</sup> *ibid* [47]-[51]

<sup>571</sup> *R v Chenia* [2002] EWCA Crim 2345

<sup>572</sup> *R v Flynn and St John* [2008] EWCA Crim 970

<sup>573</sup> *R v Chenia* [2002] EWCA Crim 2345 [107]

<sup>574</sup> *R v Flynn and St John* [2008] EWCA Crim 970 [56] See also *Bentum* (1989) 153 JP 538



Usefully, Gage LJ in *Flynn* noted the factors, based on the expert evidence before the court, which may impact on the ability of a lay listener to undertake voice identification:

(3) The ability of a lay listener correctly to identify voices is subject to a number of variables. There is at present little research about the effect of variability but the following factors are relevant:

- (i) the quality of the recording of the disputed voice or voices;
- (ii) the gap in time between the listener hearing the known voice and his attempt to recognise the disputed voice;
- (iii) the ability of the individual lay listener to identify voices in general. Research shows that the ability of an individual to identify voices varies from person to person;
- (iv) the nature and duration of the speech which is sought to be identified is important. Obviously, some voices are more distinctive than others and the longer the sample of speech the better the prospect of identification;
- (v) the greater the familiarity of the listener with the known voice the better his or her chance of accurately identifying a disputed voice.

However, research shows that a confident recognition by a lay listener of a familiar voice may nevertheless be wrong.<sup>575</sup>

As can be seen, the factors outlined show a degree of recognition of, and commonality with, the estimator variables relating to eyewitness identification outlined in 6.1.2; as such, it could be argued that the Court of Appeal – and thus by the principle of precedent the lower courts – in effect have access to group characteristic evidence, even in the absence of individual expert evidence.

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<sup>575</sup> *ibid* [16]

In addition to listing the factors which can impact the ability of the lay listener to undertake such an exercise, Gage LJ also usefully highlighted the fundamental difference between expert and lay listener testimony:

...the crucial difference between a lay listener and expert speech analysis is that the expert is able to draw up an overall profile of the individual's speech patterns, in which the significance of each parameter is assessed individually, backed up with instrumental analysis and reference research. In contrast, the lay listener's response is fundamentally opaque. The lay listener cannot know, and has no way of explaining, which aspects of the speaker's speech patterns he is responding to. He also has no way of assessing the significance of individual observed features relative to the overall speech profile. We add, the latter is a difference between visual identification and voice recognition; and the opaque nature of the lay listener's voice recognitions will make it more difficult to challenge the accuracy of their evidence.

The additional concerns of identifying a voice speaking a language other than that of the jury was an issue in the Australian case *R v Korgbara*,<sup>576</sup> which concerned the jury comparing voices in the Nigerian language of Igbo. Of interest is that in a dissent Grove J of the NSW Court of Appeal is 'fortified' that his conclusion that expert evidence should in certain cases be required, was consistent with the judgment of Nicholson LJ in *R v O'Doherty* (which will be considered shortly 6.2.2.1).

The majority in *Korgbara* determined that it was not for the court 'to establish a prescriptive rule that voice comparison evidence should only be admitted where supported by expert evidence'<sup>577</sup> noting the lack of Australian authority to support such an approach, but Grove J dissenting argued that:

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<sup>576</sup> *R v Korgbara* [2007] NSWCCA 84

<sup>577</sup> *ibid* [74]

...permitting the comparison of one language with a different language without suitable material which I would contemplate as evidence of someone either possessing relevant expertise or familiar with the voice of the accused in the language used where identity is challenged (an “ad hoc” expert) is not to establish a prescriptive rule but, to the contrary, to extend the scope of what is permissible beyond recognised boundaries.<sup>578</sup>

Although much of the preceding case law relates to jury identification of voice evidence, *Flynn* is also of interest in that at the trial of first instance, police officers had given evidence that the voice on the poor quality covert recording was the accused. At appeal this evidence was rejected on the basis that expert testimony indicated that using both acoustic and auditory analysis the experts were unable, in some cases, to even distinguish words the police officers testified having heard as part of their identification.<sup>579</sup>

The concerns regarding the reliability of such evidence is not limited to this jurisdiction. In 2015 the Ontario Court of Appeal quashed a conviction which had relied, in part, on voice identification evidence, citing those factors while noting that voice identification evidence ought to be treated with extreme caution.<sup>580</sup>

Perhaps unsurprisingly, the factors listed in *Flynn* simply reflect the concerns in respect of the estimator variables discussed at 6.1.2. There are also clear parallels with the eyewitness topics identified as being sufficiently reliable to present in court at 6.1.2, the common areas such as length of exposure, confidence of the identification, and the forgetting curve are mirrored. Although a differentiation has been made between jury and laywitness identification, what seems clear from the preceding section is that the factors that will impact the accuracy of the identification are largely the same, with the question perhaps being one of degree given that the different variable will be present in varying levels for both.

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<sup>578</sup> *ibid* [113]

<sup>579</sup> *R v Flynn and St John* [2008] EWCA Crim 970 [48] –[55]

<sup>580</sup> *R v Dodd* 2015 ONCA 286 [79]-[81]

It is arguable that the fact that the similarity in the factors affecting eye and earwitness testimony support the need for a single joined-up approach to the issue of ensuring reliable evidence comes before the courts.

### **6.2.1.3 Is there a Role for Expert Evidence in Support of Lay Earwitness Identification Evidence?**

While the case law is clear that juror voice identification in the absence of expert testimony is accepted, academically there are reservations to this idea. Ormerod expressed strong reservations, cautioning that:

If the jury have not heard expert evidence on the voice identification, it is submitted that there are serious risks involved in allowing them to conduct ad hoc identification in the courtroom...The dangers inherent in any stranger voice identification exacerbated by the delay between hearing the voices, the stress of the exercise in the courtroom, the danger of bias, the risk of over confidence from the jurors, all point strongly against this as a worthwhile exercise in terms of the likely accuracy of the outcome.<sup>581</sup>

More recently, Robson and Smith,<sup>582</sup> noting the complexity of the task jurors are being asked to undertake, assert that jurors should not be asked to make voice identifications in the absence of expert auditory evidence, also noting the need for further research.

### **6.2.2 Expert Evidence: Auditory/Acoustic Analysis**

There are two distinct techniques that can and have been presented to the courts: auditory analysis and acoustic analysis. In the case of auditory analysis, the expert

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<sup>581</sup> D Ormerod 'Sounding Out Expert Voice Identification' (October 2002) *Criminal Law Review* 771, 787

<sup>582</sup> J Robson and H Smith 'Can We Have Faith Jurors Listen Without Prejudice? Likely Sources of Inaccuracy in Voice-Comparison Exercises' (2019) 2 *Criminal Law Review* 115

listens repeatedly to samples of the suspect's voice and compares this to the unknown voice, repeatedly, looking for points of similarity/dissimilarity.<sup>583</sup>

In contrast, acoustic analysis relies on electronic analysis of the voice. Bull describes acoustic analysis thus:

[R]ecognition by spectrographic voice analysis is based upon an electronic scan of a speech sample which produces a visible amplitude/frequency/time display. This spectrogram can then be compared with other spectrograms to see if a match can be made.<sup>584</sup>

Eriksson notes that while the usefulness of the spectrogram is indisputable, its utility in voice identification was grossly overestimated. As with other technological solutions, the technology changes and greater reliability is claimed. The current method of auditory analysis typically utilises this visual analysis coupled with aural examination of the voice samples.<sup>585</sup> The majority of members of the only professional organisation of forensic speech scientists – the International Association for Forensic Phonetics and Acoustics (IAFPA) – utilise the dual approach of aural/acoustic analysis. At their 2007 Conference the IAFPA passed a resolution in which the organisation comprehensively rejected the approach of only using the spectrogram:

IAFPA dissociates itself from the approach to forensic speech comparison known as the “voiceprint” or “voicegram” method...The Association

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<sup>583</sup> D Ormerod ‘Sounding Out Expert Voice Identification’ (October 2002) *Criminal Law Review* 771, 773

<sup>584</sup> R Bull ‘Voice Identification by Man and Machine: a Review of Research’ in SMA Lloyd-Bostock (ed), *Psychology in Legal Contexts: Applications and Limitations* (Palgrave Macmillan 1981), 33

<sup>585</sup> A Eriksson ‘Aural/ Acoustic Methods in Forensic Phonetic Case Work’ in A Neustein and HA Patel (Eds) *Forensic Speaker Recognition: Law Enforcement and Counter-terrorism* (Springer-Verlag New York, 2012)

considers this approach to be without scientific foundation and should not be used in forensic casework.<sup>586</sup>

Ormerod<sup>587</sup> considered the strengths and weaknesses of both approaches, concluding that the approach taken by the Court of Appeal in Northern Ireland in *R v Doherty*<sup>588</sup> was to be welcomed. Key concerns noted by Ormerod in relation to auditory analysis were that it is person dependant, the individual expert compares the samples and judges if there are similarities between the recorded voices. There has been no large-scale study to ascertain the error rates associated with the technique and there is also no objective way to check the reliability of the technique as applied by an individual expert in a given case. He concludes that auditory analysis 'offers only a very subjective assessment of the match between voice samples'.<sup>589</sup>

However, the review of the reliability of the 'more scientific' technique of acoustic analysis is also subject to concerns. The concerns among others that the accuracy is reduced if the speaker changes or alters their voice, whether deliberately or not, led the National Research Council in 1979 to conclude that:

...technical uncertainties concerning the present practice of voice identification are so great as to require that forensic applications are approached with great caution.<sup>590</sup>

A more recent change is the attempt to automate voice recognition, via automatic speaker recognition (ASR) technology. ASR would seem to represent a variant of acoustic analysis and works on the principle that individual voices can be distinguished

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<sup>586</sup> International Association for Forensic Phonetics and Acoustics 'Voiceprint Resolution' (IAFPA Conference Plymouth UK 2007) <https://www.iafpa.net/the-association/resolutions/> accessed 21/02/19

<sup>587</sup> D Ormerod 'Sounding Out Expert Voice Identification' (October 2002) *Criminal Law Review* 771

<sup>588</sup> *R v O'Doherty* [2003] 1 Cr App R 5CA (Crim Div) (NI)

<sup>589</sup> D Ormerod 'Sounding Out Expert Voice Identification' (October 2002) *Criminal Law Review* 771, 778

<sup>590</sup> National Research Council *On the Theory and Practice of Voice identification* (Washington DC National Academies Press 1979), 2

from one another as the vocal tracts of individuals give rise to differences in the voice by virtue of the different anatomical dimensions and proportions. The known sample voice is compared to the questioned voice and the machine generates a statistical model giving a likelihood ratio. The samples are also compared against a set of statistical models from a reference population.<sup>591</sup>

This technology appeared before the courts recently and will be considered shortly

#### **6.2.2.1 The Case Law**

A review of the case law relating to this approach shows a clear divergence in the approach taken by the English and Northern Irish courts. Auditory analysis was the approach in *R v Robb*<sup>592</sup> where the evidence was ruled admissible. The court in *Robb* acknowledged the fact that auditory analysis was very much the minority expert approach, noting that:

The great weight of informed opinion, including the world leaders in the field, was to the effect that auditory techniques unless supplemented and verified by acoustic analysis, were an unreliable basis of speaker identification.<sup>593</sup>

The court also noted that other western European countries did not accept such evidence, instead focussing on acoustic analysis.<sup>594</sup> Lord Bingham, while accepting the expert evidence, highlighted the absence of hard data or publication which would allow testing of the technique.<sup>595</sup> Commenting on the reservations that the court seemed to be expressing, Ormerod suggests that any decision to reject the evidence on the basis of lack of reliability would undermine the established position that there is

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<sup>591</sup> *R v Slade* [2015] EWCA Crim 71 [155]

<sup>592</sup> *R v Robb* (1991) 93 Cr App R 161 CA

<sup>593</sup> *ibid* 166

<sup>594</sup> *ibid* 166

<sup>595</sup> *ibid* 166

no enhanced test of admissibility for expert evidence.<sup>596</sup> Having noted that, Ormerod suggested that:

If English law also required explicitly that the technique was demonstrated to meet a standard of reliability, admissibility would be extremely unlikely.<sup>597</sup>

This does raise the interesting question, had this technique been put before the courts with the revised CrimPR in place, would it have been ruled admissible? As Ormerod notes, auditory analysis cannot be independently appraised, there is no indication of failure rates, and given the lack of published data as to its efficacy, it seems unlikely that it would meet the requirements of the CrimPR and as such would be ruled inadmissible.

If such evidence continues to be admitted, despite the inception of the enhanced test of admissibility, this would seem to affirm previously noted and somewhat jaundiced statements that 'each ill-informed decision becomes a precedent binding on future cases' (as per fn 181). It seems arguable that with the arrival of the enhanced test of reliability there would be a strong case for either contesting the admissibility of such evidence, or at the very least the expert opinion would be cast in such a way that the weight of the evidence would be greatly reduced.

In contrast to the ruling in *Robb*, the Northern Ireland Court of Appeal in *R v O'Doherty*<sup>598</sup> ruled that voice recognition evidence based purely on acoustic analysis was not admissible, ruling that reflecting current scientific knowledge:

...no prosecution should be brought in Northern Ireland in which one of the planks is voice identification given by an expert which is solely

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<sup>596</sup> D Ormerod 'Sounding Out Expert Voice Identification' (October 2002) *Criminal Law Review* 771, 776

<sup>597</sup> *ibid* 778

<sup>598</sup> *R v O'Doherty* [2003] 1 Cr App R 5CA (Crim Div) (NI)



confined to auditory analysis. There should also be expert evidence of acoustic analysis ... which includes formant analysis.<sup>599</sup>

In *R v Flynn and St John*<sup>600</sup> the Court of Appeal considered the issue of both lay and expert testimony relating to voice recognition. It is of note that both the experts who gave testimony in this case had utilised both auditory and acoustic analysis, and although the court did note that this technique is the more reliable, it then went on to note in a postscript that:

...we think it neither possible nor desirable to go as far as the Northern Ireland Court of Criminal Appeal in *O'Doherty* which ruled that auditory analysis evidence given by experts in this field was inadmissible unless supported by expert evidence of acoustic analysis.<sup>601</sup>

One assumes that such evidence would still need to be supported by other credible evidence. *Robb* came before the courts well before the CrimPR and, more critically, the revised CrimPR with the reliability test came into effect in 2015. If one reviews the cases regarding voice identification evidence which have come before the courts since 2015, *R v Minnott*<sup>602</sup> is the only reported case before the Court of Appeal, and as that was originally heard in June 2015 preceded the revised CrimPR. As such, at this time there do not appear to any reported cases where the reliability of auditory analysis has been assessed against the criteria within r19 and the associated practice directions.

Given that the Court in *Flynn and St John* seem to acknowledge the limitations of auditory analysis, it is of some interest to note the following observation from Elizabeth McClellan, the expert in *Slade* who follows the practice of auditory analysis:

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<sup>599</sup> *ibid* [59]. Formants are the distinctive frequency components of the acoustic signal produced during speech

<sup>600</sup> *R v Flynn and St John* [2008] EWCA Crim 970

<sup>601</sup> *ibid* [62]

<sup>602</sup> *R v Minnott (Simone Estha)* [2016] EWCA Crim 2215

It's important to recognise that forensic voice analysis isn't equivalent in any sense to identification evidence from, for instance, DNA or fingerprinting. The conclusions we can reach in terms of voice identification should only be used in conjunction with other evidence as part of a picture. You can't identify an individual solely using an opinion from a forensic voice analyst.<sup>603</sup>

This is of interest in that as an expert who is noted to have testified in many cases,<sup>604</sup> the witness recognises the limitations of the approach. What is unclear from this is if she applies the same caution to forensic analysis via acoustic analysis.<sup>605</sup>

*Slade* is of interest in another respect in that the Court of Appeal considered the use of automatic speaker recognition (ASR) technology in the form of a system known as Batvox.

The court declined to admit the evidence from the Batvox on a number of grounds:

- The sample size of the reference population, 20 or 30 speakers, may not adequately cover all the possible variations in the geometry of the vocal cords
- That in testing the system generated more than 30% false positives (likelihood ratio of greater than one)
- That the court was being asked to accept that the software reaches the right results with no explanation to the court of how this is so
- That the expert witness and counsel were not able to indicate how such evidence should or could appropriately be presented to a jury
- That the evidence presented to the court was that different ASR machines would present different results dependant on their software, and that the

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<sup>603</sup> *R v Slade* [2015] EWCA Crim 71 [146]

<sup>604</sup> *R v Minott*; *R v Sachithanathan* [2012] EWCA Crim 1859; *McIntyre v HM Advocate* [2009] HCJAC 63; *R v Paton* [2007] EWCA Crim 1572; *R v Terry* [2004] EWCA Crim 3252.

<sup>605</sup> Review of the relevant academic databases has not located any publications authored by E McClellan to determine if she does have a view re other techniques.

appellants had been unable to satisfy the court how the jury should address this conflict

- The expert witnesses had not used the system in any other trial/casework, and the court felt that the experts' responses to this query had been hesitant<sup>606</sup>

This would seem to reflect the position in *R v T* in that the lack of a sufficiently robust database was a feature in the rejection of the evidence. However, Davis LJ, noting that the appeal had been decided on other grounds, stated:

...it is neither necessary nor appropriate for us to make any definitive ruling in this case as to whether such evidence can ever be admissible, or as to what the position might be in the future in light of any further scientific advance.<sup>607</sup>

Broeders,<sup>608</sup> writing in 2004, reflects this assertion, noting that the performance of ASR did not warrant their large-scale use in anything beyond investigative applications. As such, the situation with regard to the possible future admissibility of ASR is possible, but noting the courts' concerns, it seems likely that currently such evidence would fall foul of the CrimPR, although these were not expressly mentioned within the judgment.

The need for caution on the part of the jury when assessing the expert evidence relating to voice identification is made clear in the suggested modified *Turnbull* direction outlined in the current Crown Court Compendium,<sup>609</sup> which includes case specific detail, e.g. that the recording quality was affected as it was recorded through a wall.

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<sup>606</sup> *R v Slade* [2015] EWCA Crim 71 [177] - [181]

<sup>607</sup> *ibid* [176]

<sup>608</sup> APA Broeders 'Forensic Speech and Audio Analysis, Forensic linguistics – A Review: 2001-2004' (Conference Paper to 14<sup>th</sup> INTERPOL Forensic Science Symposium, Lyon France, June 2004)

<sup>609</sup> Judicial College *Crown Court Compendium Part 1* (July 2019), 15-31

With regard to voice identification, Robson<sup>610</sup> argues that the piecemeal development of the case law has led to inconsistencies in approach that may adversely affect the effective management and use of such evidence, noting that the courts in a number of jurisdictions<sup>611</sup> have struggled with approaches to voice identification evidence, being criticised for their ad hoc approaches.

### **6.3 Eyewitness, Earwitness, and Expert Evidence – A Whole System Approach?**

A number of elements seem clear from the forgoing discussion; that expert evidence in court is not ordinarily admissible in relation to the reliability of eyewitness testimony, and that in the case of voice identification, expert testimony is admissible in two respects a) to conduct the comparison exercise and b) to explain an earwitness' evidence, but it is argued such evidence is not always being sought when both logic and science would indicate that it would support the jury in the search for truth.

Arguably there is a clear case for expert evidence to be more generally accessed in the case of both eye and earwitness identification evidence. But a concern given the number of, particularly, eyewitness identifications that come before the court is how practical would this actually be? This is potentially where a whole systems approach may be more relevant, making use of expert testimony not just at the point of trial evidence, but in the earlier phases of the criminal justice process.

Twining<sup>612</sup> argues, taking as a working example the issue of eyewitness misidentifications, that the legal system, by focussing on the decisions of the Court of Appeal and the individual cases, fails to address the broader systemic problems which can result in injustice. Twining describes this approach which may take account of the work of multiple disciplines as a contextual approach.

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<sup>610</sup> J Robson 'Lend Me Your Ears': An Analysis Of How Voice Identification Evidence is Treated in Four Neighbouring Criminal Justice Systems' (2018) 22 *International Journal of Evidence and Proof* 218

<sup>611</sup> *ibid* 218

<sup>612</sup> W Twining *Identification and Misidentification in Legal Processes: Redefining the Problem in Rethinking Evidence Exploratory Essays* (second Edition) (2006). Note this chapter was originally published in SMA Lloyd-Bostock and BR Clifford (eds), *Evaluating Witness Evidence: Recent Psychological Research and New Perspectives* (John Wiley and Sons, 1983)

Identification procedures are governed by Code D of PACE<sup>613</sup> and it is argued that they are a reflection of this contextual approach, formulating a comprehensive procedure for identification evidence to be collected and collated which reflects the requirements of law, while reflecting the findings from relevant psychological/scientific research, and thus allowing the formulation of a consensus within the scientific community permitting a set of common guidelines to be agreed and formulated while research continues to further refine the approach.<sup>614</sup>

Taking this notion, Robson<sup>615</sup> discusses in some detail the steps taken to develop a robust process, developed in conjunction with the scientific evidence, for voice identification. This process and the associated guidelines were approved and issued as Home Office Circular 57/2003<sup>616</sup> and have been identified as representing best practice. The relevance in terms of the expert witness is that the procedure stipulates the assistance of a 'commissioned expert witness' to select the speech samples which will go into the voice 'line up'.<sup>617</sup>

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<sup>613</sup> Police and Criminal Evidence Act 1984 (PACE) Code D Code of practice for the identification of persons by police officers (February 2017) London The Stationery Office Code D para 1.2 states that nothing in it precludes the use of aural identification procedures, and annex B, para. 18, states that a witness may ask any member of an identification parade to speak. In such a case, the witness should first be asked if he can make a purely visual identification, and must be reminded that participants will have been chosen on the basis of their appearance only. Members of the parade may then be asked to comply with the request of the witness to hear them speak. However Code D makes no direct provision for cases in which the attempted identification is to be made on the basis of voice alone.

<sup>614</sup> e.g. GL Wells, M Small, S Penrod, RS Malpass, SM Fulero and CAE Brimacombe 'Eyewitness Identification Procedures: Recommendations for Line-ups and Photo- spreads' (1998) 22 *Law and Human Behavior* 603; Technical Working Group for Eyewitness Evidence *Eyewitness Evidence: A Guide for Law Enforcement* (Washington DC: US Department of Justice 1999); AS Luby 'Strengthening Analyses of Line-Up Procedures: a Log-Linear Model Framework (2017) 16 *Law, Probability and Risk* 241

<sup>615</sup> J Robson 'Lend Me Your Ears': An Analysis Of How Voice Identification Evidence in Treated in Four Neighbouring Criminal Justice Systems' (2018) 22 *International Journal of Evidence and Proof* 218

<sup>616</sup> Home Office Circular 57/2003 Advice on the use of Voice identification parades

<sup>617</sup> Home Office circular 57/2003 at 12

However, despite being circulated to police forces, unlike with eyewitness identifications, there is no requirement to use them, and Robson notes that in a freedom of information request of the 43 forces questioned:

- 21 had no data/had conducted no voice identifications
- 4 had considered using parades in specific cases but deemed it unnecessary/inappropriate
- 7 indicated that on policy grounds they did not undertake voice parades.<sup>618</sup>

Setting aside for a moment the poor compliance with 57/2003 a question which requires consideration is why, given such a seemingly robust approach to the structure of the 'voice parade' with the use of experts to formulate the 'parade', is this not also the case with eyewitness parades?

A possible response to this is that the database which contains visual images is likely to have been created with expert assistance, and also that the computer-based systems contain a large database of images to be drawn from, thus enhancing the ability to choose suitable foils.<sup>619</sup> However, it should be noted that as the selection of the foils is undertaken by officers, there is a degree of subjectivity in selecting individuals who resemble 'the age, general appearance and position in life' of the individual being placed in the parade. Rees,<sup>620</sup> commenting on *Flynn*, argues that the case for the incorporation of both visual and voice identification procedures into Code D has considerable force.

There does not appear to be any guidance setting out the rationale for the exclusion of such expert testimony in the formulation of eyewitness parades. However, it should be noted that the current reforms contained within PACE Code D do reflect current

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<sup>618</sup> J Robson 'A Fair Hearing? The use of Voice Identification Parades in Criminal Investigations in England and Wales' (2017) 1 *Criminal Law Review* 36, 45

<sup>619</sup> R Horry, A Memon, R Milne, DB Wright and G Dalton 'Video Identification of Suspects: A Discussion of Current Practice and Policy in the United Kingdom' (2013) 7 *Policing: A Journal of Policy and Practice* 307

<sup>620</sup> T Rees 'Evidence: Identification – Voice Recognition' (2008) 10 *Criminal Law Review* 799

scientific theory with regard to memory and recall, and as such there has been expert input but at a much earlier point in the process (as per Fn 607).

The guidance within PACE Code D stipulates that eyewitness identification parades, both video and in person, will consist of individuals who 'so far as possible, resemble the suspect in age, height, general appearance and position in life'.<sup>621</sup> PACE Code D has been described as an 'intensely practical document'<sup>622</sup> and given that the requirement is that similar looking individuals are selected for the lineup, this appears on the surface a far simpler procedure than collating similar sounding sound clips. Broadly speaking, an individual is male or female, has dark hair or light hair, but it is arguably far less clear cut when a voice is 'gruff' or the suspect has 'a northern accent'. It should be noted that there is ongoing research to try to improve the level of objective evidence in relation to lay voice identification.<sup>623</sup> It should also be noted that in the case of a visual identity parade, the police have the suspect present so therefore the identification of people who generally resemble the suspect is perhaps more straightforward.

It may be the case that the norms applied to the selection of those foils in relation to eyewitness identification are still somehow those seen as aligning to 'commonsense'?

The public policy/resource consideration is also worth noting. Roberts,<sup>624</sup> in considering the rights of the defendant pre-trial, notes the reality of finite resources places constraints on the opportunities for defence participation in the investigative process. Roberts cites Dworkin who claimed that a suspect does not have the procedural right for the most accurate procedures that are available to distinguish guilt

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<sup>621</sup> Pace Code D Annex A para 2 and Annex B para 16

<sup>622</sup> I Dennis *The Law of Evidence* (sixth edition, Sweet & Maxwell, London, 2017), 7-014

<sup>623</sup> H Smith, N Braber, J Robson, D Wright and S Kelly (2018) 'Not Deep Just Average: Improving the Usability of Lay-Listener Voice Descriptions' (2018) Germanic Society for Forensic Linguistics (GSFL2018), University of York, York, 2-5 August 2018

<sup>624</sup> A Roberts 'Pre-Trial Defence Rights and the Fair Use of Eyewitness Identification Procedures (2008) 71 *Modern Law Review* 331

and innocence. As Roberts notes, it can be generally assumed that greater accuracy implies greater cost.<sup>625</sup>

Noting that some police forces have taken a policy decision not to undertake voice parades as per the Home Office guidance, this must raise a question as to the enforceability of the guidelines, and the issue that they are precisely that – guidance. Rees<sup>626</sup> expresses the concern that the guidance ‘fails to offer sufficient guidance, and it lacks the peremptory force which some elements of the Code [PACE] possesses.’

The 2006 case *R v Hall*<sup>627</sup> would seem to echo this concern. In *Hall*, one ground for appeal was that the appellant citing 57/2003 should have been asked for his consent for a sample of his recorded interview to be used for identification purposes, and had not been. Refusing leave on this ground, the single judge noted there was nothing unlawful in the prosecution using the sample for comparison purposes.<sup>628</sup>

Noting the apparent lack of consequence for police forces not adhering to the guidance in 57/2003, and the much greater number of visual identity parades undertaken, it may be appropriate to speculate as to the financial impact on already stretched police budgets of retaining expert opinion in determining visual line ups? This would seem to replicate the government response to LC325 and the refusal to legislate on cost grounds.

It is arguable that by utilising expert witnesses earlier in the process, the evidence which does finally come before the courts has been reached in a rational manner, thus improving the likelihood that it is probative. However, while the utilisation of expert witnesses to ensure that robustness of the evidence coming before the courts is as grounded as it can be, the fact remains that it is still for the jury to decide if they accept that voice identification testimony to deliver the verdict.

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<sup>625</sup> *ibid* 335

<sup>626</sup> T Rees ‘Evidence: Identification – Voice Recognition’ (2008) 10 *Criminal Law Review* 799

<sup>627</sup> *R v Hall* [2006] EWCA Crim 3401

<sup>628</sup> *ibid* [21]



#### 6.4 Is the *Turnbull* Direction Adequate?

A *Turnbull* direction is required wherever identification evidence has been adduced. While the Crown Court Compendium lists those factors which need to be raised within the *Turnbull* direction to advise jurors of the elements which affect the reliability of the identification, it is argued that the direction is insufficiently nuanced.

To illustrate this point, it is helpful to revisit one of the topics identified by Desmarais and Read,<sup>629</sup> in relation to eyewitness identification, as being sufficiently reliable to present in court, which has also been identified as an element in earwitness testimony; that of accuracy confidence. The current *Turnbull* guidelines for eyewitness and earwitness testimony in this respect are similar, both noting that confidence and accuracy do not always mean that an identification is correct. The relevant sections of the sample guidance from the Crown Court Compendium for eyewitness identification evidence state that:

You must be cautious when considering this evidence because experience has shown that any witness who has identified a person can be mistaken even when the witness is honest and sure that he/she is right. Such a witness may seem convincing but may be wrong.<sup>630</sup>

And in respect of earwitness voice identification evidence:

When considering this evidence you need to be especially cautious because experience has shown that any witness who gives identification evidence can be mistaken; and this is so even when the witness is honest and convinced that he/she is right. Such a witness may well seem convincing but this does not mean that the witness cannot be wrong. This is so even when a witness knows a person well and says that he/she has recognised this person.<sup>631</sup>

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<sup>629</sup> Discussed in section 6.1.2

<sup>630</sup> Judicial College *Crown Court Compendium Part 1* (July 2019), 15-4

<sup>631</sup> *ibid* 15-32

It is arguable that the tone and content of the directions do not fully reflect the psychological research and evidence with regard to this parameter, in particular they lack specificity. There is no reflection in the direction that there is any sound scientific basis for the assertion, and it is suggested with respect that ‘experience has shown’ is altogether too nebulous.

The report to the New Jersey Supreme Court in *Henderson*<sup>632</sup> suggested modified directions to the jury, which it is argued more accurately reflect the situation and are more nuanced than the current *Turnbull* directions given above:

You heard testimony that (insert name of witness) expressed his/her level of certainty that the person he/she selected is in fact the person who committed the crime. As I explained earlier, a witness’s level of confidence, standing alone, may not be an indication of the reliability of the identification. Although some research has found that highly confident witnesses are more likely to make accurate identifications, eyewitness confidence is generally an unreliable indicator of accuracy.<sup>633</sup>

Prior to the changes, the equivalent section with regard to the level of confidence of the witness was less specific and, it is argued, not dissimilar to the *Turnbull* direction in being nebulous. The guidance cautioned:

Although nothing may appear more convincing than a witness’s categorical identification of a perpetrator, you must critically analyze such testimony. Such identifications, even if made in good faith, may be mistaken. Therefore, when analyzing such testimony, be advised that a

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<sup>632</sup> *State v Henderson* 27 A3d 872 (NJ 2011)

<sup>633</sup> Criminal Practice Committee and the Model Criminal Jury Charge Committee *Report of the Supreme Court Committee on Model Criminal Jury Charges on the Revisions to the Identification Model Charges*. Approved by the Supreme Court Committee on Model Criminal Charges January 9, 2012 [New Jersey]

witness's level of confidence, standing alone, may not be an indication of the reliability of the identification.<sup>634</sup>

The model jury charge makes no reference to earwitness testimony, which is perhaps unsurprising given the remit of the original paper was to examine issues around eyewitness testimony, but it can be argued that the wording, and the evidence in the direction, are equally as applicable to earwitness testimony.

A possibility put forward in LC325 was the previously discussed idea of court appointed experts (4.2.5). Although the idea was not taken forward, it could be that in particularly difficult identification cases there could be an advantage to a judge being able to take expert advice to aid in structuring the content of the *Turnbull* direction. Arguably this may be possible under the umbrella of CrimPR r3 as an element of judicial notice after investigation. This would be an unconventional approach, Phipson notes that judicial notice is usually taken in relation to facts which are obvious and uncontroversial and generally in receipt of documentary hearsay rather than enquiry.<sup>635</sup>

A further option which could potentially either further inform the *Turnbull* direction, or be accessed more generally, is the use of the primer guides noted in 4.2.4. The Crown Court Compendium Part 1 (bench book) notes both DNA<sup>636</sup> and forensic gait analysis<sup>637</sup> primers will 'be of use to all parties'. At this time, there does not appear to be an equivalent primer for either eye or earwitness evidence,<sup>638</sup> but were such a document to be made available, this would ensure that all parties have access to good quality research and the current expert opinion in relation to the area of interest for the court.

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<sup>634</sup> Ibid Appendix B

<sup>635</sup> Phipson on Evidence 19<sup>th</sup> Edition (Sweet and Maxwell, 2017), 29-18

<sup>636</sup> Judicial College *Crown Court Compendium Part 1* (July 2019), 15-45

<sup>637</sup> *ibid*, 15-48

<sup>638</sup> Planned future primers are Statistics and Collision Analysis – The Royal Society 'Science Advice in the Broader Context: Interactions with the Public, Law and Parliament' (nd) [https://www.ingsa.org/wp-content/uploads/2018/03/Science-Advice-and-Law\\_JMaxton-compressed.pdf](https://www.ingsa.org/wp-content/uploads/2018/03/Science-Advice-and-Law_JMaxton-compressed.pdf) accessed 20/02/19

A good example of judge's directions changing in response to research is the 'delayed complaint direction' in the case of sexual assault highlighted by Sjolin and Gerry<sup>639</sup>. This addresses the issue of making assumptions about the behaviour of victims of sexual assault, in particular the issue that the trauma of rape may inhibit the individual making a complaint at the earliest possible opportunity. In *R v D*<sup>640</sup> Latham LJ said:

The judge is entitled to make comments as to the way evidence is to be approached particularly in areas where there is a danger of a jury coming to an unjustified conclusion without an appropriate warning ... We think that cases where the defendant raises the issue of delay as undermining the credibility of a complainant fall into a similar category save clearly that the need for comment is in this instance to ensure fairness to the complainant... the fact that the trauma of rape can cause feelings of shame and guilt which might inhibit a woman from making a complaint about rape is sufficiently well-known to justify a comment to that effect.<sup>641</sup>

Subsequent case law has supported this position and the Crown Court Compendium gives the sample 'delayed complaint direction'<sup>642</sup> which ensures that jurors are supported in their decision making, by having advice based on current psychological theory.

## 6.5 Conclusion

*Turner* permits expert evidence to be adduced 'to furnish the court with scientific information which is likely to be outside the experience and knowledge of a judge or jury.' It can be argued that for both ear- and eyewitness testimony, expert evidence as to the fallibilities of that evidence to enable a jury to make a rational judgment as to the reliability of the evidence are outside this experience. The common-sense

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<sup>639</sup> F Gerry and C Sjolín 'Rape Trauma Direction' *Counsel* (nd)

<https://www.counselmagazine.co.uk/articles/rape-trauma-direction> accessed 28/10/19

<sup>640</sup> *R v D* [2008] EWCA Crim 2557

<sup>641</sup> *ibid* [11]

<sup>642</sup> Judicial College *Crown Court Compendium Part 1* (July 2019), 20-5

understanding of the weight of that evidence does not accord with current research. It is argued that this area of evidence clearly highlights that the *Turner* principle is too blunt a tool in some cases. As such, it is argued that by failing to include the *Turner* test in CP190/ LC 325 an opportunity was missed.

Returning to focus on the way in which expert evidence as to eye- and earwitness identification evidence could be approached, it is important to again note that the courts are organs of the state, and under intense pressure in terms of both time and resources. This being the case, the notion that the thousands of cases a year where identification evidence is part of the case could all access expert evidence to the effect noted above is clearly unsupportable. Therefore there is a need to consider if a suitably modified *Turnbull* direction would suffice.

It is argued that earwitness testimony, being the smaller component, and the more problematic form of evidence, and already meeting the requirements for expert testimony should access expert testimony in respect of lay and/or jury voice identification.

The consensus on the management of identification parades under PACE Code D, recognising the findings of psychological research, goes some way to try to ensure that the identification evidence which does come before the courts has a degree of reliability which may not have been the case a few decades ago. However, the failure of the Home Office to mandate the voice parade procedures set out in circular 57/2003, and the apparent failure of police forces to adopt these procedures, could be seen to represent a dereliction of the duty to ensure that only reliable evidence is brought before the courts. The voice identification procedure is demanding of both time and resources, and it seems likely that this and the failure to mandate it have given the message that it is not a priority.

The *Turnbull* directions currently are insufficiently nuanced to clearly outline to the jury the factors they need to consider when weighing the evidence on both ear and

eyewitness testimony. It is suggested that revisions of the type set out by New Jersey would go some way to rectifying this by ensuring that the current expert position is laid out in front of the jury.

While a primer is not currently on the publication schedule, it seems likely that a joint exercise between the judicial college and the Royal Society would enable the judicial college to commission a primer addressing the issues concerned with identification evidence.

## Chapter 7

### The Polygraph: Detecting Truth from Lies – A case study

#### 7.0 Introduction

In the preceding chapters we have explored and analysed the difficulties experienced by jurors in understanding and weighing expert evidence, and the difficulties of both lawyers and in some cases the judiciary in presenting and understanding elements of expert evidence.

As explored in the previous chapter, the *Turner* principle precludes expert testimony on matters within the normal experience of the jury. The credibility of a witness or the accused, unless they have a relevant psychiatric condition, falls very clearly into that territory of within the normal experience; after all, it is highly unlikely that any member of a jury will never have been lied to.

Throughout the investigation and trial there is a need to distinguish truth from lie. Could expert evidence as to polygraph testing support the criminal justice system in this search for truth? This chapter does not put forward a proposition that the evidence of the polygraph replaces the judgement of the jury as to whether a defendant or witness is being, and has been, truthful, but rather will propose that the physiological parameters measured by the polygraph may be used as another evidential thread in support of the jury arriving at their judgment.

The Offender Management Act 2007 sees the polygraph mandated for use, for the first time, in the English criminal justice system. The polygraph has a long and somewhat chequered history, with its use being widespread in some jurisdictions and barred in others. The polygraph, more commonly but less accurately, known as the 'lie detector'

has long been controversial, with its use on daytime TV shows<sup>643</sup> doing nothing to help that controversy.

The accepted position within this jurisdiction was stated in *Fennell v Jerome Property Management Ltd*:

Evidence produced by the administration of a mechanically or chemically or hypnotically induced test on a witness so as to show the veracity or otherwise of that witness is not admissible in English law.<sup>644</sup>

In this chapter, taking this assertion as our starting point, we will undertake an examination of mechanically-obtained evidence, asking the question whether the use of the polygraph as a licence condition for serious sexual offenders under s30 of the Offender Management Act 2007 is the start of a creeping development that may (and perhaps should) see the polygraph being used more widely.

The other two techniques identified within *Fennell* are outwith this thesis as they do not address issues of detecting truth or falsity: Hypnosis is seen as an aid to recall and truth drugs are intended to 'force' the individual to tell the truth.

At its most basic, the purpose of a criminal trial is to determine the guilt or innocence of the accused. To do this, a court or jury must usually determine whether accounts given by witnesses can be relied upon as true, or (in the case of the accused or other defence witnesses) cannot at least be dismissed as clearly false.

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<sup>643</sup> The recent death of a participant on the daytime TV Jeremy Kyle Show after taking a polygraph lead to cancellation of the show amid concerns the show that over played the reliability of the polygraph. There was widespread media coverage e.g. A Singh 'Jeremy Kyle producers admit lie detector tests may have given the wrong results' *The Telegraph* 25 June 2019 <https://www.telegraph.co.uk/news/2019/06/25/jeremy-kyle-producers-admit-lie-detector-tests-may-have-given/> accessed 23/07/19; *BBC News online* 'Jeremy Kyle Show: MPs criticize 'irresponsible' ITV over lie detectors' (25 June 2019) <https://www.bbc.co.uk/news/entertainment-arts-48756290> accessed 23/07/19

<sup>644</sup> *Fennell v Jerome Property Maintenance Ltd*, *The Times*, 26 November 1986, QBD. [17]  
[SEP]



Witnesses may of course be mistaken or confused, or the wrong inferences may be drawn from circumstantial evidence, but the task of the court or jury may also be complicated by the inconvenient fact that witnesses sometimes resort to wilful lies. In some cases, it may be clear that one or more witnesses must be lying, because the opposing accounts differ in ways that cannot be attributed to anything else. At a criminal trial, we rely upon the court or jury to detect both honest errors and lies, having perhaps seen the witness in question wilting under skilful cross-examination; but a false witness in court will usually be repeating lies that he has told before, and we rely on the police and CPS to weed out manifestly false or untrustworthy accusations before they even get to court.

Unfortunately, this reliance may often be misplaced. The available evidence (as we shall see) does not suggest that individuals or juries are particularly good at distinguishing true accounts from plausible lies. Arguably, courts or juries could benefit in some cases from expert guidance. At present, neither the police nor the courts make use of available technology, in the form of lie detection equipment. It is generally supposed that evidence derived from such technology would necessarily be inadmissible. But is it? And if it is, can such a prohibition be justified?

### **7.1 Theory, Reliability and Admissibility: The Polygraph**

The polygraph is a tool which, it is claimed, can indicate to someone who is an expert in its use, and its interpretation, whether an individual is at least attempting to tell the truth. It is widely used in the US, primarily by security services<sup>645</sup>, and is also used in the criminal justice systems of some other jurisdictions, notably Japan.<sup>646</sup> It is important to note at the outset that even in US jurisdictions that do permit polygraph

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<sup>645</sup> For example, Department of Defense Directive 5210.48 April 24, 2015. The CIA, FBI and US Customs and Border Protection all stipulate the requirement for polygraph testing within their application process. See <https://www.cia.gov/careers/application-process> <http://www.fbiagentedu.org/fbi-requirements/> <https://www.cbp.gov/careers/join-cbp> accessed 27/02/16

<sup>646</sup> S Hira and I Furumitsu 'Polygraphic Examinations in Japan: Application of the Guilty Knowledge Test in Forensic Investigations' (2002) 4 *International Journal of Police Science and Management* 16

evidence at trial, there is no provision for compelled testing.<sup>647</sup> However, polygraph usage in other fields may be compulsory. In English law, the prime example is the introduction of the polygraph as a licence condition for some serious sexual offenders, under the Offender Management Act 2007, s 30,<sup>648</sup> which sees its first (albeit very limited) use within the criminal justice system.

Does the introduction of testing under this act represent the leading edge of a creeping development that may one day lead to polygraph evidence being adduced routinely in English criminal trials, or will it remain restricted to this very narrow function and remain a 'step too far' for the criminal courts? If such evidence were ever to come before the courts as expert evidence, a second question must be does such evidence meet the requirements of part 19 of the CrimPR?

There are barriers to its wider acceptance which, while closely related, are quite distinct. The first of these is the issue of reliability; the second (and ultimately more problematic) issue, concerns the role of the expert witness relative to that of the court or jury as triers of fact; and the third is whether such evidence could ever be admitted under the current rules of evidence.

As with much technology, 'lie detection' is constantly evolving with alternative approaches such as P300 brain based-lie detection<sup>649</sup> and more recently combining the polygraph with functional MRI (fMRI) scanning<sup>650</sup> claiming ever greater accuracy. Although this chapter will focus on the conventional polygraph, the issues being discussed are equally applicable to other newer technologies.

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<sup>647</sup> New Mexico which has the most liberal rules for the admission of polygraph evidence states in the New Mexico Rules of Evidence at 11-707F that 'No witness shall be compelled to take a polygraph examination.'

<sup>648</sup> Offender Management Act 2007 (Commencement No 6) Order 2013 SI No. 1963 (C82)

<sup>649</sup> J Danaher 'The Comparative Advantage of Brain Based Lie Detection: the P300 Concealed Information Test and Pre-Trial Bargaining' (2015) 19 *International Journal of Evidence and Proof* 52

<sup>650</sup> NJ Gordon, FB Mohamed, SM Platek, H Ahmad, J M Williams, SH Faro 'The Effectiveness of fMRI Data When Combined With Polygraph Data' (2018) 12 *European Polygraph* 19

Whilst the focus is on the 'conventional' polygraph it is important to acknowledge separately the debate currently taking place in the US with regard to the newer fMRI techniques, such evidence having been ruled inadmissible in Federal court.<sup>651</sup> Moreno<sup>652</sup> explores the complex nature of the debate looking to the possible uses of neuroimaging by the courts holding out the possibility that 'one day cognitive neuroscientists may perform the magic of accurate mind reading',<sup>653</sup> but that in the interim it is necessary that both academics and practitioners understand the limits of the research. Noting the current concerns regarding the approach Schauer<sup>654</sup> argues that the question of when the level of validity and reliability of neuroscientific techniques is sufficient for them to be used within the legal system is ultimately a legal and not a scientific question. At this time this debate has not featured in this jurisdiction but there is no reason to believe it would be any less complex.

### **7.1.1 What is the Polygraph and does it Work?**

At its most basic, the polygraph measures an individual's 'fight or flight response'. During times of heightened stress, the sympathetic nervous system will produce changes in blood pressure, heart rate, respiratory rate, sweating, and pupil dilatation. The polygraph measures changes to the first four of these in response to questions set by the examiner.<sup>655</sup>

Typically, the parameters measured are the galvanic skin response, respiration, heart rate, and relative blood pressure. The theory runs that in response to heightened stress the respiratory rate will rise; this is measured by two pneumographs, rubber tubes typically containing a sensor. One is placed across the chest and the other across the upper abdomen to detect changes in the rate and depth of breathing. The galvanic skin response, which will change as arousal will cause an increase in sweating, is

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<sup>651</sup> *US v Semrau* 693 F. 3d 510 - Court of Appeals, 6th Circuit, 2012

<sup>652</sup> J A Moreno, 'The Future of Neuroimaged Lie Detection and the Law' (2009) 42 *Akron Law Review* 717

<sup>653</sup> *ibid* 737

<sup>654</sup> F Schauer 'Can Bad Science be Good Evidence? Neuroscience, Lie Detection, and Beyond' (2010) 95 *Cornell Law Review* 1191

<sup>655</sup> E Pivovarova, J Edersheim, J Baker and B Price 'A Polygraph Primer: What Litigators Need to Know' (2014) 26 *The Jury Expert* 1

typically detected with probes on the end of the fingers, increased sweating increases the skin's conductivity. Blood pressure and heart rate should also both rise in response to arousal, this being monitored by a cardiopneumograph, similar to the blood pressure cuff used by doctors. It is perhaps worth noting at this point that the technology used to obtain the reading during the polygraph is well established and, properly maintained, has a good record of reliability.<sup>656</sup>

The polygraph does not give a direct indication of deceit. Rather, the theory is that deceit leads to psychological arousal, which in turn creates physiological arousal. The polygraph measures physiological responses that correspond to this arousal. The measurements taken by the polygraph are processed and scored to compute an overall index, which is used to make a judgment as to whether the subject is being truthful or not.<sup>657</sup>

The most widespread approach is that of the control question test (CQT). This is the technique most widely used in the US<sup>658</sup> and is also used for examinations under the Offender Management Act<sup>659</sup> which will be discussed later in the chapter. In this technique the subject is asked questions that fall into three categories:

- 1 – control/comparison questions
- 2 – questions relevant to the incident under investigation
- 3 – irrelevant questions with no bearing on the incident

The CQT compares the subject's physiological responses to 'relevant' questions (e.g., 'Did you stab X?'), with those of 'control/comparison' questions. The control questions

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<sup>656</sup> Both manual and automated machines for monitoring of blood pressure and heart rate are used widely in healthcare. The recording of the galvanic skin response and the pneumographs are also simple and established technology.

<sup>657</sup> National Research Council: *The Polygraph and Lie Detection*. Committee to Review the Scientific Evidence on the Polygraph. Division of Behavioral and Social Sciences and Education. (Washington, DC: The National Academies Press 2003) 32

<sup>658</sup> American Psychological Association, 'The Truth About Lie Detectors (aka Polygraph Tests) 2004 <https://www.apa.org/research/action/polygraph> accessed 2/11/19

<sup>659</sup> National Offender Management Service, 'Polygraph Examinations: Instructions for imposing Licence Conditions for the Polygraph on Sexual Offenders' (2014), 2.6.5

are formulated to reflect the generally threatening nature of relevant questions which generally concern past misdeeds similar to those being investigated, e.g. 'Have you ever hit someone?'<sup>660</sup>

The theory is that the physiological response will be greater for an individual being deceitful in response to relevant questions than for the control questions; whereas an innocent individual will have smaller responses to the relevant questions than the control questions.

There are a variety of evaluation techniques for the analysis of the data obtained from a polygraph. The technique most favoured currently are numerical scoring systems which utilise either 3 or 7 point scales.<sup>661</sup> Discussion of the relative merits of each scoring system are outwith the scope of this thesis, however, to understand how the polygraph results are reached, it is useful to look briefly at one of the scoring formats. The empirical scoring system (ESS) is a relatively recent technique<sup>662</sup> which claims to allow the expert giving evidence to attribute a level of statistical significance to the results.<sup>663</sup>

The ESS works with the CQT technique and comprises a three position scale (+, 0, -). A score is attributed whenever there is a visible difference in the response between the relevant and the comparison questions. The galvanic skin response is double weighted meaning that it scores +2, 0 or -2, and the respiratory and blood pressure/heart rate each score +1, 0 or -1.

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<sup>660</sup> American Psychological Association (2004) The Truth about Lie Detectors (aka Polygraph Tests) <http://www.apa.org/research/action/polygraph.aspx> accessed 31/12/15

<sup>661</sup> B Robertson 'The Use of an Enhanced polygraph Scoring Technique in Homeland Security: The Empirical Scoring System – Making a Difference' (2014) 43 *Polygraph* 79, 85

<sup>662</sup> The technique was first reported in the following paper, noting in the disclaimer that it was "to provide an open source, objective and scientifically defensible method for analysing polygraph data" R Nelson, DJ Krapohl and M Handler 'Brute-Force Comparison: A Monte Carlo Study of the Objective Scoring System version3 (OSS-3) and Human Polygraph Scorers' (2008) 37 *Polygraph* 185

<sup>663</sup> R Nelson, M Handler, P Shaw, M Gougler, B Blalock, C Russell, B Cushman and M Oelrich 'Using the Empirical Scoring System' (2011) 40 *Polygraph* 67

The possible results using this scoring system from a polygraph examination are:

$\geq +2$  no deceit indicated (pass)

$\leq -4$  deceit indicated (fail)

Anything in between is inconclusive.

The alternative and less widely used test is the concealed information test (CIT) (also known as the guilty knowledge test (GKT)). In the CIT/GKT the subject is shown items or asked questions about matters known only to individuals linked to the crime, to determine if these provoke a significant physiological response. Where, for example,<sup>664</sup> the offender is known to have left the scene in a Honda, a polygraph question posed to the subject might be:

The getaway car was a

- Nissan
- Honda
- Toyota
- Ford
- Chrysler

The correct detail is contained within a number of distractors or controls. In one form of the test, the examinee is instructed to say 'no' to all possibilities and the physiological response to each is noted, and that elicited in response to the items known only by an individual with knowledge of the crime (guilty knowledge) are compared to those elicited by the controls.

The issue of polygraph reliability is contentious and will be addressed shortly.

### **7.1.2 Admissibility of Polygraph Evidence**

In English law, polygraph evidence is generally assumed to be inadmissible. However there is little direct authority. Referring to the quote from *Fennell v Jerome* at the start

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<sup>664</sup> G Ben-Shakhar, M Bar-Hillel and M Kremnitzer 'Trial by Polygraph: Reconsidering the Guilty Knowledge Technique in Court' (2002) 26 *Law and Human Behavior* 527

of this chapter, Stockdale and Grubin<sup>665</sup> note that this was a first instance decision concerning a 'truth drug', and that no reported English authorities directly address the admissibility of polygraph evidence as an aid to assessing the credibility of witnesses. There are some English cases where the question of polygraph admissibility is touched upon, but not in any detail, and at best these offer only limited support to the notion that such evidence is inadmissible.<sup>666</sup>

If the issue of admissibility were to be raised in connection with a criminal prosecution, it would therefore fall to be determined primarily on the basis of general principles, although some assistance may be gleaned from US and Commonwealth cases (and one decision from the Judicial Committee of Privy Council) that more directly address the use of polygraph evidence.

The issue of polygraph admissibility has been considered by the Supreme Courts of Canada, Australia, and the US over the past 30 years and the consistent message has been that such evidence is inadmissible.

In *R v Béland*,<sup>667</sup> the greatest concern expressed by the Canadian Supreme Court was not the reliability of the polygraph, but the more fundamental concern that it would usurp the role of the jury:

...based upon a consideration of rules of evidence long established...,  
the polygraph has no place in the judicial process where it is employed  
as a tool to determine or to test the credibility of witnesses.<sup>668</sup>

Of the issue of polygraph reliability McIntyre J noted:

...we were not supplied with sufficient evidence to reach a conclusion.  
However it may be said that even the finding of a significant percentage

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<sup>665</sup> M Stockdale and D Grubin 'The Admissibility of Polygraph Evidence in English Criminal Proceedings' (2012) 76 *Journal of Criminal Law* 232

<sup>666</sup> *R v McMahon* [2010] EWCA Crim 1953; *R v Thornton* [2012] EWCA Crim 2461; *R v J* [2014] EWCA Crim 2271; *R v McCallion* [2016] EWCA Crim 1180

<sup>667</sup> *R v Béland* [1987] 2 SCR 398

<sup>668</sup> *ibid* [18]

of errors in its results would not, by itself, be sufficient grounds to exclude it as an instrument for use in the courts.<sup>669</sup>

This was a 3 to 2 decision in which Wilson J (dissenting) argued that polygraph evidence should be admissible as it went to the core issue in a case where evidence was primarily one person's word against the other.<sup>670</sup> She determined that, in this case, the probative value of this evidence outweighed possible prejudicial effect.<sup>671</sup>

Concerns as to polygraph evidence supplanting the function of the jury and concerns regarding the reliability of the tool were subsequently explored in the US case *Scheffer*,<sup>672</sup> where in a split decision the US Supreme Court ruled polygraph evidence inadmissible in proceedings to which Rule 707 of the Military Rules of Evidence applied. This rule states:

Notwithstanding any other provision of law, the results of a polygraph examination, the opinion of a polygraph examiner, or any reference to an offer to take, failure to take, or taking of a polygraph examination, shall not be admitted into evidence.

The question for the Supreme Court was whether this unconstitutionally abridged the accused's right to present a defence, given that this relied on the results of a polygraph test he had 'passed'. In a majority opinion, the court concluded that Rule 707 did not breach this right. For the majority, Justice Thomas noted that the accused's right to present a defence is not unlimited and that rule 707 serves the following legitimate interests in the criminal trial process:

- only reliable evidence is admitted;

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<sup>669</sup> *ibid* [19]

<sup>670</sup> *ibid* [30]

<sup>671</sup> *ibid* [56]

<sup>672</sup> *United States v Scheffer (1998) No. 96-1133. 523 US 303*



- the jury makes the determination of credibility ‘A fundamental premise of our criminal trial system is that ‘the jury is the lie detector’;<sup>673</sup> and
- it avoids litigation over matters other than guilt or innocence – allowing polygraph evidence would lead to parallel litigation concerning the reliability of the technique, the competence of the polygrapher, the formulation of the questions etc., all of which would impede the effective function of the courts.

It is perhaps arguable that, as MRE 707 applies only to the military, the ruling does not preclude the use of the polygraph in other contexts in the US, but the previously noted comment about the ‘fundamental premise’ of the jury as lie detector is equally applicable to civilian trials.

Justice Stevens (dissenting) argued that the blanket exclusion of polygraph evidence under rule 707 did indeed abridge the right of the accused to mount a defence, thus violating sixth amendment rights. Considering the issue of reliability, he noted a number of studies which placed the reliability of polygraph tests at between 85% and 90%<sup>674</sup> and that studies cited in the majority opinion as evidence for the poor reliability of polygraph evidence, placed the accuracy at 70%.<sup>675</sup> He further noted that the studies indicate that the polygraph was more likely to find the guilty innocent than vice versa.<sup>676</sup>

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<sup>673</sup> *ibid* 313

<sup>674</sup> *ibid* As cited by Justice Stevens in his dissenting opinion at fn 20 of the opinion—‘D Raskin, C Honts and J Kircher, *The Scientific Status of Research on Polygraph Techniques: The Case for Polygraph Tests*, in 1 *Modern Scientific Evidence* 572 (D Faigman, D Kaye, M Saks, & J Sanders, eds. 1997) (hereinafter Faigman) (compiling eight laboratory studies that place mean accuracy at approximately 90%); *id.*, at 575 (compiling four field studies, scored by independent examiners, that place mean accuracy at 90.5%); Raskin, Honts, & Kircher, *A Response to Professors Iacono and Lykken*, in Faigman 627 (compiling six field studies, scored by original examiners, that place mean accuracy at 97.5%); S. Abrams, *The Complete Polygraph Handbook* 190-191 (1989) (compiling 13 laboratory studies that, excluding inconclusive results, place mean accuracy at 87%).’

<sup>675</sup> *ibid* fn 21 of opinion. ‘WG Iacono and DT Lykken, *The Scientific Status of Research on Polygraph Techniques: The Case against Polygraph Tests*, in Faigman 608 (compiling three studies that place mean accuracy at 70%).’

<sup>676</sup> *ibid* 334

He also explained that role of the jury would not be supplanted by the admission of polygraph evidence,<sup>677</sup> arguing that the jury would be guided by the judge as to the weight of the evidence.

As to the issue of collateral proceedings, while supporting a rule prescribing minimum standards for admissibility, he clearly argued against the blanket exclusion.

The use of such evidence in the US civilian courts varies, in that some states permit polygraph evidence and some do not. Udashen and Knight<sup>678</sup> set out the situation in each state, noting that while the most 'liberal' in terms of polygraph admissibility is New Mexico, where polygraph evidence is treated on the same basis as other expert evidence, a majority of states now admit polygraph evidence in limited circumstances.

In 2003, the Supreme Court of Western Australia in *Mallard v R*<sup>679</sup> reviewed the literature and case law concerning polygraph evidence noting the 'lengthy and often acrimonious debate' between 'polygraphers... and certain psychologists, physiologists and others who regard polygraphy as lacking any scientific basis...and therefore oppose their evidentiary use'.<sup>680</sup> This could be viewed as a concern by the court that it is the polygraph industry which is behind the push for greater polygraph acceptance, or it may simply be a recognition of the level and intensity of the ongoing debate. In a lengthy judgment the court concluded that:

...it has not been shown that the polygraph technique is a reliable method for determining truth or untruth and nor is there the degree of acceptance within the relevant scientific community which would indicate that it is being seen as so.<sup>681</sup>

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<sup>677</sup> *ibid* 335

<sup>678</sup> G Udashen & N Knight 'The Law of Polygraphic Evidence' Paper presented at the State Bar of Texas Advanced Criminal Law Course 2003.

[http://www.sualaw.com/Appearances-Articles/The\\_Law\\_of\\_Polygraph\\_Evidence.pdf](http://www.sualaw.com/Appearances-Articles/The_Law_of_Polygraph_Evidence.pdf)  
accessed 31/12/15

<sup>679</sup> *Mallard v The Queen* [2003] WASCA 296

<sup>680</sup> *ibid* [306]

<sup>681</sup> *ibid* [369]

A further case which warrants consideration is *Bernal v R*,<sup>682</sup> which was a ruling from the Privy Council on appeal from the Jamaican courts. This case is deemed particularly relevant given the recent ruling from the UKSC clarifying the degree of persuasiveness that should be attributed to such cases.<sup>683</sup>

The appellant had been refused leave to admit polygraph evidence to bolster his credibility. The resident magistrate had ruled polygraph evidence inadmissible. This was upheld by Jamaica's Court of Appeal, but they certified the following questions when granting leave to appeal to the Privy Council:

(a) Whether the learned magistrate erred in law in holding that to permit an expert to give opinion evidence of polygraph tests which he administered on the appellant ... would encroach on the learned resident magistrate's judicial function; and

(b) Whether evidence of the findings of a polygraph examination by a competent expert are admissible where such evidence is sought to be adduced by a defendant, in particular to rebut an allegation of guilty knowledge.<sup>684</sup>

The Privy Council upheld the decision of the lower court, and addressed the certified question thus:

...their lordships do not find it necessary to express any final conclusion as to whether or not there may be exceptional cases where the evidence of an expert may be admissible to testify as to the results of a polygraph test .... Their lordships are satisfied that the resident

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<sup>682</sup> *Bernal v R (Jamaica)* [1997] UKPC 18

<sup>683</sup> *Willers v Joyce* [2016] UKSC 44

<sup>684</sup> *Bernal v R (Jamaica)* [1997] UKPC 18 [29]

magistrate was not in error. The evidence before him did not suggest that polygraph tests are infallible...<sup>685</sup>

This is of interest in two respects. On one hand, there is no indication of what such exceptional circumstances might be, so arguably this may represent a potential 'window' for adducing polygraph evidence. Equally interesting is the comment that there is 'no evidence polygraphs are infallible'. This suggests that polygraph evidence was, in this case at least, being judged against a different yardstick to any other evidence. In practice, no evidence is infallible, or immune to misinterpretation, and admissible witness testimony (especially eyewitness or earwitness identification) can be notoriously unreliable.<sup>686</sup> Why then should such a criticism be made in respect of polygraph evidence, particularly when it is tendered on behalf of the defence, where the only requirement is to introduce an element of reasonable doubt?

## **7.2 Post Conviction use of the Polygraph**

The Offender Management Act 2007 is the first legislation to make specific provision for the use of polygraph evidence in the England and Wales. As such, it is arguable that it may provide the first 'crack in the door' with regard to polygraph admissibility in this jurisdiction. The relevant provisions are contained within part 3 of the Act. Sections 28-30 provide for polygraph testing to be required as a condition of licence for certain sexual offenders.<sup>687</sup>

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<sup>685</sup> *ibid* [39]

<sup>686</sup> See fn 475

<sup>687</sup> Key conditions: Over the age of 18 at release; imprisonment for a minimum of 12 months; relevant sexual offence means (a) an offence specified in Part 2 of Schedule 15 to the Criminal Justice Act 2003 (specified sexual offences); (b) an offence specified in paragraphs 1 to 21 of Schedule 16 to that Act (offences under the law of Scotland); or (c) an offence specified in Part 2 of Schedule 17 to that Act (offences under the law of Northern Ireland).

Following a successful pilot across the East and West Midlands probation areas, this provision has now rolled out across England and Wales.<sup>688</sup> The individuals who administer the testing must have completed training and met assessment criteria set out in the Polygraph Rules 2009/619. As yet, within this jurisdiction no cases concerning polygraph evidence have been ruled admissible, but it seems highly likely that were this to occur the polygraph operator would be the expert witness.

When an offender makes clinically significant disclosures in the course of the polygraph, these are triggers for further questioning and/or investigation. The polygraph findings alone cannot be used as grounds to return the offender to custody, and s30 of the Act incorporates a statutory ban on the use of evidence from the polygraph in subsequent criminal proceeding against that individual:

30 (1) Evidence of any matter mentioned in subsection (2) may not be used in any proceedings against a released person for an offence.

(2) The matters so excluded are—

(a) any statement made by the released person while participating in a polygraph session; and

(b) any physiological reactions of the released person while being questioned in the course of a polygraph examination.<sup>689</sup>

Perhaps surprisingly, the rationale for s 30(2)(b) is not addressed in the explanatory notes associated with the act. Neither did the issue arise, beyond noting its presence, in the House of Lords Grand Committee debate.<sup>690</sup> However, if one looks back further, the question of polygraph results being admitted in evidence was the subject of a Commons written answer in 1997 with the then Secretary of State for the Home Department, effectively restating the Archbold view of *Fennell v Jerome*, responding that:

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<sup>688</sup> T Gannon, J Wood, A Pina, E Vasquez and I Fraser 'The Evaluation of the Mandatory Polygraph Pilot' (2012) *Ministry of Justice Research series 14/12*

<sup>689</sup> Offender Management Act 2007

<sup>690</sup> HL Deb 22 July 2013 Vol 747 col 417-422

The courts have held that, as a matter of principle, evidence produced by mechanical, chemical or hypnotic truth test on a witness is inadmissible to show the veracity or otherwise of that witness.<sup>691</sup>

The statutory provisions must be read along with the associated polygraph rules,<sup>692</sup> which are prescriptive and set out how polygraph examinations are to be conducted.

Recent figures indicate that 166 individuals have been returned to custody since the use of the polygraph started in August 2014.<sup>693</sup> But, although it is clear that polygraph cannot be used as the sole indicator for return to custody, what is not clear from this information is what additional information contributed to the decision to return the offender to custody.

### **7.2.1 Extending the use of the Polygraph**

If the introduction of polygraph testing in the Offender Management Act 2007 opened the first crack in the door,<sup>694</sup> its inclusion in the draft Domestic Abuse Bill<sup>695</sup> which recently came before Parliament suggests that the crack may indeed grow wider. Clause 52 of the draft Bill makes provision for the amendment of s 28 of the 2007 Act to provide for the application of a polygraph condition to individuals convicted of domestic abuse. The intention would be that the National Probation Service pilot the use of polygraph testing with high-risk perpetrators.<sup>696</sup>

Interestingly, the explanatory notes to the Bill, while noting that, as per s30 of the Offender Management Act 2007, any statement or physiological reaction may not be

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<sup>691</sup> HC Deb 24 Jun 1997 Vol 296 col 443W

<sup>692</sup> Polygraph Rules 2009/619

<sup>693</sup> Telegraph Reporters 'Lie detectors have been used to send 160 sex offenders back to prison' *The Telegraph* (16 February 2018) <https://www.telegraph.co.uk/news/2018/02/16/liedetectorshave-used-send-160-sex-offenders-back-prison/> accessed 10/02/19

<sup>694</sup> J Elton 'The Polygraph in the English Courts: A Creeping Inevitability or a Step Too Far?' (2017) 81 *Journal of Criminal Law* 66

<sup>695</sup> Draft Domestic Abuse Bill 2018

<sup>696</sup> Secretary of State for the Home Department 'Transforming the Response to Domestic Abuse: Consultation Response and Draft Bill' (CP15) January 2019 at 3.4.1

used in criminal proceedings in which the person is the defendant, does expressly envisage that ‘any statement made by a person in a polygraph session could ... be used as the basis for recalling the offender to prison for breach of a licence condition.’<sup>697</sup>

It should be noted that the explanatory notes are only guides to possible interpretation issues, and that as neither the 2007 Act nor the amendments proposed by the current Bill refer expressly to this, it may be that the suggestion in the current notes would be equally persuasive in respect of the 2007 Act as originally enacted. To put it another way, it is reasonable to suppose that what s30 does not forbid is permissible. Nonetheless the explanatory notes offering this specific possible interpretation may be seen as a potential widening of the reach of the polygraph evidence.

Considering the argument that this introduction of the polygraph could represent a creeping development, or pressure for such development, a recent article from a current prisoner/detainee is of interest as it begs the question – if the polygraph is now deemed sufficiently accurate by the probation service to send people back to prison, what about those who maintain their innocence?<sup>698</sup> It seems it is only a matter of time before an individual returned to detention on the basis of polygraph evidence challenges its use in the courts.

### **7.3 The Polygraph and Human Rights Legislation**

The interface between polygraph evidence and the European Convention on Human Rights has been considered in two Strasbourg cases,<sup>699</sup> and once by the English courts.

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<sup>697</sup> Draft Domestic Abuse Bill Explanatory notes clause 52 at [219]

<sup>698</sup> Current Detainee/ Prisoner HMP Frankland Probation using polygraph *insidetime* 30<sup>th</sup> January 2019 <https://insidetime.org/probation-using-polygraph/> accessed 10/02/19

<sup>699</sup> A search on the website of the European Court of Human Rights using the search term ‘polygraph’ on 18/06/19 returned a further 22 cases between 2007 and 2018. None of these cases analyses the use of polygraph evidence in respect of engagement with or breach of the various articles. Listed cases are *CAS and CS v Romania* [20/03/2012] App no 26692/05; *Šečić v Croatia* [31/05/2007] App no 40116/02; *M and C v Romania* [27/09/2011] App no 29032/04; *Fazliyski v Bulgaria* [16/04/2013] App 40908/05; *IC v Romania* [24/05/2016] App no 36934/08; *Buntov v Russia* [5/06/2012] App no 27026/10; *Tyagunova v Russia* [31/07/2012] App no 19433/07; *Tikhonova v Russia* [30/04/2012] App no 13596/05; *Beloborodov v Russia*

The chosen approaches considered polygraph evidence in light of both article 6 and article 8.

In *A v Germany*,<sup>700</sup> the accused asserted that his article 6 rights to a fair trial were violated by a refusal to allow him to be interviewed with the aid of a polygraph. The European Commission on Human Rights did not consider that this refusal had resulted in any unfairness. It was pointed out once again that polygraph results are not 100% reliable, and the commission also noted that if such evidence were permitted, unreasonable inferences might then be drawn as to the guilt of any individuals who decline to take one. The issue of the inferences which might be drawn will be considered shortly (7.4.3).

Polygraph evidence was further considered in *Bragadireanu v Romania*<sup>701</sup>, where the accused voluntarily took a polygraph test without legal representation. He was subsequently convicted. The court did not find that his article 6 rights had been violated, as there was evidence as to guilt other than the polygraph. The judgment does not clarify what the outcome of the polygraph was, but does note that it 'is not the court's role to speculate as to what the outcome of the criminal proceeding would have been had the answers to the polygraph been taken into account'<sup>702</sup> from which it seems reasonable to assume it indicated deceit on the part of the defendant!

In neither of these cases did the commission expressly exclude the possibility of polygraph evidence being used, or determine that its use would breach the article 6 right to a fair trial. This would accord with the previously noted point (4.1.2) that the

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[21/10/2010] App no 11342/05; *Ianoş v Romania* [12/07/2011] App no 8258/05; *Potcovă v Romania* [17/12/2013] App no 27945/07; *Jemeljanovs v Latvia* [06/10/2016] App no 37364/05; *Agarkova v Russia* [15/05/2018] App no 29951/09; *Marina Alekseyeva v Russia* [19/12/2013] App no 22490/05; *Gerasimenko and Others v Russia* [01/12/2016] App no 5821/10 and 65523/12; *Markaryan v Russia* [04/04/2013] App no 12102/05; *Mađer v Croatia* [21/06/2011] App no 56185/07; *TK v Lithuania* [12/06/2018] App no 14000/12; *MS v Ukraine* [11/07/2017] App no 2091/13; *Dobriyeva and others v Russia* [19/12/2013] App no 18407/10; *MP and others v Bulgaria* [15/11/2011] App no 22457/08; *Lisica v Croatia* [25/02/2010] App no 20100/06

<sup>700</sup> *A v Germany* (1984) 6 EHRR CD 360

<sup>701</sup> *Bragadireanu v Romania* (2008) Application no. 22088/04

<sup>702</sup> *ibid* [102]



ECHR leaves it to the domestic courts to judge if expert testimony is sufficiently reliable to be used.

Kocsenda,<sup>703</sup> commenting on the decisions of the Canadian Supreme Court which categorically excludes both polygraph,<sup>704</sup> and more recently hypnotically-retrieved<sup>705</sup> evidence, asks whether the UK courts should follow suit. Commenting on the article 6 case law, Kocsenda notes that little guidance is likely to be gleaned from that case law, given the wide margin of appreciation to national jurisdictions demonstrated.

Although there is currently little European case law in this respect, a possible future concern could be that if the polygraph is proven to be sufficiently reliable to be admissible, then arguably the article 6 right to a fair trial could be engaged if the accused is unable to introduce reliable exculpatory evidence. As will be argued later in the chapter there are potential (although highly speculative routes) by which such evidence could come before the courts.

If it were to reach the point where there is an acceptance that the polygraph gives an accurate indication of deceit (or truth) then arguably the individual wishing to adduce that evidence is in a very similar situation to that of the individual seeking to adduce exculpatory evidence in relation to the unreliability of eyewitness testimony. However, a key difference is that in the event the polygraph was deemed admissible it would almost certainly be via expert evidence, whereas eyewitness testimony is not.

During the project pilot regarding the use of the polygraph for the post-conviction management of serious sexual offenders, the claimant in *R (on application of C) v Ministry of Justice*<sup>706</sup> sought to overturn the polygraph requirement of his licence on the grounds that it breached his article 8 and article 14 rights.<sup>707</sup> The court accepted

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<sup>703</sup> K Kocsenda 'Supreme Court of Canada Hypnosis Evidence: Admissibility' (2007) 71 *Journal of Criminal Law* 497

<sup>704</sup> *Phillion v R* [1978] 1 SCR 18

<sup>705</sup> *R v Trochym* 2007 SCC 6

<sup>706</sup> *R (on application of C) v Ministry of Justice* [2009] EWHC 2671 (Admin) [2010] HRLR 3

<sup>707</sup> Art 8 Right to respect for private and family life and Art 14 Prohibition of discrimination

that the imposition of the polygraph condition did indeed engage article 8, but that the seriousness of the offences for which he had been convicted justified the imposition for the purposes of article 8(2).<sup>708</sup> With regard to article 14, the claimant sought to establish that the fact that an individual from a different part of the country would not be subject to the polygraph condition was discriminatory. The court determined article 14 was not engaged, noting that the rationale for the pilot study was fairly set out in the guidance note issued by the secretary of state.<sup>709</sup>

An important point to note with regard to this last case is that it is the only case where the consideration relates to a mandatory polygraph condition being imposed on an individual who has already been convicted; the other cases both relate to polygraph tests willingly undertaken by the accused individuals.

## **7.4 Objections to the Admissibility of Polygraph Evidence**

It may be argued that there are a number of underpinning principles which would restrict/prevent the admission of such evidence, these will now be considered.

### **7.4.1 Polygraph Reliability**

If polygraph evidence were to be adduced in an English court, it would be expert opinion and thus have to meet the requirements of part 19 of the CrimPR and associated practice directions.<sup>710</sup> The revised CrimPR ensure that expert opinion evidence both meets the *Turner* principles, and further that such evidence is reliable. The practice directions at 19A.4<sup>711</sup> cite *R v Dlugosz*, noting that ‘it is essential to recall the principle which must be applicable, namely in determining the issue of admissibility, the court must be satisfied that there is a sufficiently reliable scientific basis for the evidence to be admitted...’ This perhaps goes to the heart of the polygraph debate. The polygraph, in its various forms, has been around since the

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<sup>708</sup> *R (on application of C) v Ministry of Justice* [2009] EWHC 2671 (Admin) [2010] HRLR 3 [31]

<sup>709</sup> *ibid* [32]

<sup>710</sup> CrimPR, Part 19, October 2015

<sup>711</sup> Crim Practice Directions, October 2015, 19A.4

1920s and, as previously noted, there is still extensive debate as to whether polygraph evidence is reliable, and as to whether it has a sound scientific basis.

The influential 2003 report by the US National Academy of Sciences<sup>712</sup> while critical of much of the research available at the time, and of the accuracy levels claimed by the proponents of the polygraph, concluded that:

Notwithstanding the limitations of the quality of the empirical research and the limited ability to generalise to real-world settings, we conclude that in populations of examinees such as those represented in the polygraph research literature, untrained in countermeasures, specific-incident polygraph tests for event-specific investigations can discriminate lying from truth telling at rates well above chance, though well below perfection.<sup>713</sup>

A later meta-analysis of 38 studies undertaken by the American Polygraph Association (APA) reported accuracy of 89% (confidence interval 83-95%) for single-issue tests.<sup>714</sup> Such a substantial meta-analysis, covering as it does some 3,723 examinations, is welcome, but the source should be noted as it is arguable that it is in the interests of the APA to demonstrate the effectiveness of the polygraph.

Ben-Shakhar and Elaad<sup>715</sup> conducted a meta-analysis of 80 laboratory studies to estimate the validity of the CIT/GKT approach using electrodermal measures. There was an average correlation coefficient of 0.79 between the detection measure and the

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<sup>712</sup> National Research Council: *The Polygraph and Lie Detection. Committee to Review the Scientific Evidence on the Polygraph* (Washington, DC: The National Academies Press 2003)

<sup>713</sup> *ibid* 214

<sup>714</sup> M Gougler, R Nelson, M Handler, D Krapohl, P Shaw and L Bierman 'Meta-Analytic Survey of Criterion Accuracy of Validated Polygraph Techniques Report Prepared for American Polygraph Association Board of Directors' (2011) 40 *Polygraph* 193, 203

<sup>715</sup> G Ben-Shakhar and E Elaad 'The Validity of Psychophysiological Detection of Information with the Guilty Knowledge Test: a Meta-Analytic Review' (2003) 88 *Applied Psychology* 131

criterion of guilt v innocence. While noting the strongly positive results, the authors recommended further study.

One of the criticisms of the polygraph is that it can 'be beaten' and is thus an unreliable tool. Ben-Shakhar<sup>716</sup> reviewing the experimental literature concerning the effectiveness of both psychological and physical countermeasures concludes that 'it is possible and in fact quite easy to train people to produce or enhance their physiological responses..., and thus distort the outcomes of both the CQT and the CIT.'<sup>717</sup> It was noted that the detection of physical countermeasures was easier than the detection of psychological countermeasures.

It may be arguable that if the test were to be used as a 'one off' single issue test, such as might be the case during an investigation, then there is little time to learn the techniques. Perhaps more concerning is its use in longer term post-conviction management of sex offenders, where multiple polygraphs will be conducted over an extended period of time.

A more fundamental criticism of the polygraph, particularly in relation to the CQT, is that the basic underpinning theory is flawed in that it assumes that an innocent examinee will respond more strongly to the comparison question than the relevant questions.<sup>718</sup> The dilemma created was captured well by The British Psychology Association:

This premise is somewhat naive as truth tellers may also be more aroused when answering the relevant questions, particularly: (i) when these relevant questions are emotion evoking questions (e.g. when an innocent man, suspected of murdering his beloved wife, is asked

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<sup>716</sup> G Ben-Shakhar 'Countermeasures' in B. Verschuere, G. Ben-Shakhar, & E. Meijer (Eds.), *Memory detection: Theory and application of the Concealed Information Test* (Cambridge University Press New York 2011)

<sup>717</sup> *Ibid* 213

<sup>718</sup> WG Iacono 'Effective Policing: Understanding How Polygraph Tests Work and are Used Criminal (2008) 35 *Justice and Behavior* 1295

questions about his wife in a polygraph test, the memory of his late wife might re-awaken his strong feelings about her); and (ii) when the innocent examinee experiences fear, which may occur, for example, when the person is afraid that his or her honest answers will not be believed by the polygraph examiner.<sup>719</sup>

The counterargument is that a skilled polygrapher should be capable of phrasing questions and establishing an environment which will compensate for such an effect.<sup>720</sup>

Conducting a polygraph is not a simple 'plug in and press play' operation, in that to conduct the polygraph examination the examiner needs firstly to undertake a pre-test interview with the examinee, and on the basis of this formulate both the relevant questions to be asked and also the comparison questions. This need to individualise each examination raises a concern as to the subjectivity of such an examination. Reviewing the available literature, Synnott et al.<sup>721</sup> note that all three stages of the CQT examination (pre-test interview, examination, and post-test evaluation) can be criticised as lacking objectivity and standardisation. It is arguable that with proper training many of these concerns can be addressed.

However, even with the considerable reservations that exist, a number of academics have examined whether, correctly administered, a polygraph could meet the *Daubert*<sup>722</sup> criteria for admissibility of expert evidence. There are four criteria

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<sup>719</sup> The British Psychology Society *A review of the current scientific status and fields of application of Polygraphic Deception Detection. Final report from the BPS Working Party* (British Psychological Society 2004), 10

<sup>720</sup> J Synnott, D Dietzel and M Ioannou 'A Review of the Polygraph: History, Methodology and Current Status' (2015) 1 *Crime Psychology Review* 59, 69

<sup>721</sup> *ibid* 67-69

<sup>722</sup> *Daubert v Merrell Dow Pharmaceuticals Inc* [1993] 113 S. Ct 2786. Prior to this case the Frye Standard (*Frye v US* 293 F1013(1923)) generally applied to expert evidence, which was only admissible if it was 'sufficiently established to have general acceptance in the field to which it belongs'. *Daubert* standard requires that scientific evidence admitted is sufficiently reliable and was the principle underpinning the proposed changed set out by the Law Commission in LC 325

identified within *Daubert*, which if met would potentially make the evidence admissible. These are:

1. Testability
2. Known error rate
3. Peer review
4. Publication

Vrij<sup>723</sup> expresses the opinion that while CQT may meet criteria 2 and 3, it does not meet criteria 4 and is unclear on criteria 1. In contrast, Ben-Shakhar et al.<sup>724</sup> conclude that, properly administered, the CIT/GKT is capable of meeting all four criteria. The CIT/GKT has been used in Japan since the 1950s<sup>725</sup> and since 1970 more than 5,000 polygraph examinations per year have been undertaken by the police agencies with the accuracy rate for detection of deceit reported to be 90%.<sup>726</sup>

Revisiting the finding of the NAS report some 15 years later, Iacono and Ben-Shakhar<sup>727</sup> conclude that 2003 reservations regarding the weak scientific basis, and the lack of known error rate for the CQT test, remain essentially unchanged.

Noting such reservations and concerns, is expert testimony relating to a polygraph examination able to meet the requirements of part 19 of the CrimPR? It is argued that the technique is capable of meeting the requirements of the rules, as although there are considerable reservations in some quarters as to whether the underpinning

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<sup>723</sup> A Vrij *Detecting Lies and Deceit Pitfalls and Opportunities* 2nd edn (Wiley Chichester 2008), 335-337

<sup>724</sup> G Ben-Shakhar and E Elaad 'The Validity of Psychophysiological Detection of Information with the Guilty Knowledge Test: a Meta-Analytic Review' (2003) 88 *Applied Psychology* 131

<sup>725</sup> S Hira and I Furumitsu 'Polygraphic Examinations in Japan: Application of the Guilty Knowledge Test in Forensic Investigations' (2002) 4 *International Journal of Police Science and Management* 16

<sup>726</sup> T Yamamura and Y Miyata 'Development of the Polygraph Technique in Japan for the Detection of Deception' (1990) 44 *Forensic Science International* 257. Unfortunately lack of access to translated primary source material has limited further exploration of the situation in Japan

<sup>727</sup> WG Iacono and G Ben-Shakhar 'Current Status of Forensic Lie Detection With the Comparison Question Technique: An Update of the 2003 National Academy of Sciences Report on Polygraph Testing' (2019) 43 *Law and Human Behavior* 86

principle is valid, this is something that would have to be highlighted within the expert report. It is, in effect, the issue noted at 19A.6 of the practice directions:

19A.6 In addition, in considering reliability, and especially the reliability of expert scientific opinion, the court should be astute to identify potential flaws in such opinion which detract from its reliability, ...

Were such evidence permitted before the English courts, the body of literature which raises concerns as to the possible flaws in the theoretical basis of the technique would be part of the expert testimony. This would again return the question of whether the probative or prejudicial weight of such evidence was seen as being greater.

#### **7.4.2 The Role of the Jury as Lie Detector**

Key to much of the reasoning concerning the inadmissibility of polygraph evidence is that it would serve the same function as the jury, in that it would be determining the credibility of the witness. Further, as the operators are rarely medically qualified, they would be unable to give evidence as to state of mind as per *Turner*.<sup>728</sup> For this thesis the question must be, 'could polygraph evidence support the jury in their search for the truth by better enabling them to determine if a witness is being truthful, or would such evidence simply replicate what the jury already does?'

It is important to be clear that although the question is 'could the polygraph assist the jury', there is no question that the polygraph could, or would, replace the jury making an assessment of the totality of the evidence being given from the witness box, but what it may do is aid by providing an additional element of evidence regarding statements given out of court as part of the investigatory process.

Since any presentation of polygraph test results would involve expert opinion evidence, it is helpful to consider the role of expert evidence in establishing credibility. *R v Robinson*<sup>729</sup> remains the leading English decision.<sup>730</sup> The complainant was a 15-

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<sup>728</sup> *R v Turner* [1975] QB 834

<sup>729</sup> *R v Robinson* [1994] 3 All E.R. 346 (CA)

year-old girl with learning difficulties and the mental capacity of a seven- or eight-year-old. Following a *voire dire* the judge ruled she was competent to be a witness.

In cross-examination, the defence sought to establish that false ideas had been 'put into her head' by others. At the conclusion of the prosecution case, the Crown made an application which was granted, to call an educational psychologist who gave evidence that the complainant 'could not adopt ideas from someone else. She would have difficulties taking them on board and relating them ... She is not suggestible...'<sup>731</sup>

The court held that while it may be acceptable to call expert evidence that a witness or a confession is unreliable,<sup>732</sup> it was not permissible to call evidence as to why the witness should be regarded as reliable.<sup>733</sup> This evidence was ruled inadmissible on the basis it usurped the function of the jury by, in effect, telling them that this witness should be believed. The conviction was quashed.

The limits of this rule were clarified in *R v W* where Judge LJ held that:

There is a distinction between evidence that a condition has been identified by experts, which may explain that the memory of an apparently truthful witness may, in fact, be false (which we describe as the syndrome) and evidence from an expert witness based on a study of identical or virtually identical material to that available to the jury which directly (or indirectly) informs the jury of the expert's opinion whether the witness in question was or was not to be believed.<sup>734</sup>

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<sup>730</sup> T Ward 'Usurping the Role of the Jury? Expert Evidence and Witness Credibility in English Criminal Trials' (2009) 13 *International Journal of Evidence and Proof* 83

<sup>731</sup> *R v Robinson* [1994] 3 All E.R. 346 (CA), 373

<sup>732</sup> *Toohy v Metropolitan Police Commissioner* (1965) 49 Cr App R 148; *R v Raghip* The Times, December 9, 1991

<sup>733</sup> The court did leave open the possibility that if the defence were to call expert evidence that the witness was unreliable because of a mental abnormality outside the jury's experience then the Crown may call an expert in rebuttal.

<sup>734</sup> *R v W(Richard)*[2003] EWCA Crim 3490, cited and approved in *R v Bernard* [2003] EWCA Crim 3917 [28]



A case which initially appears similar, but with a different outcome, was *R v S(VJ)*.<sup>735</sup> Here, S appealed conviction for sexual misconduct against a 13-year-old autistic girl. Expert evidence was adduced that an individual suffering from autism would find it difficult to invent a story and then retain the details for any time. The case was appealed on the ground that this evidence had the effect of bolstering the credibility of the victim, and thus amounted to 'oath helping', in much the same way as the evidence that was held inadmissible in *Robinson*. The appeal was rejected. It was held that the disputed evidence was of general application, or background, and considered the usual characteristics of people with autism, rather than being a comment on the credibility of the individual. However, Ward argues that the difference between the two cases was:

...not that the expert evidence was 'general' in one and 'specific' in the other, but that the evidence in *VJS* both involved a lesser risk of unjustified deference by the jury than that in *Robinson*, and had greater probative value.<sup>736</sup>

Ward further notes that it was the source of the evidence that gave rise to this difference, in that it relates to the body of knowledge the experts utilised. In *VJS* the expert was talking about the body of evidence about autism, and as such this would probably meet the *Bonython* test of 'being sufficiently organized to be accepted as a reliable body of knowledge', whereas the personal knowledge of the expert in *Robinson* was unlikely to pass the same test.

In *S(VJ)*, the Court of Appeal determined that judge's summing up in the trial of first instance attributed appropriate weight to the expert testimony:

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<sup>735</sup> *R v S(VJ)* [2006] EWCA Crim 2389

<sup>736</sup> T Ward 'Usurping the Role of the Jury? Expert Evidence and Witness Credibility in English Criminal Trials' (2009) 13 *International Journal of Evidence and Proof* 83

That is not to say that she is incapable of lying and in no way is that evidence ... intended to usurp your function in assessing her evidence and deciding on its reliability.<sup>737</sup>

The relevance of this case perhaps lies in the fact that, on occasion, the courts have permitted evidence regarding credibility providing its probative value is sufficient and it does not supplant the jury as the lie detector.

This leaves open the question of what application, if any, does this line of reasoning have for polygraph evidence? It is suggested that while an expert presenting evidence from a polygraph would never say 'in my opinion the defendant was telling the truth', they might instead say:

When the test was administered, the witness reacted in [... way]. The expectation is that if lying a witness would react in [... other way]. The lack of any such reaction here is considered consistent with that of a witness who is not stressed by the question...etc. Although such a reaction can sometimes be found in witnesses who are indeed lying and the test is not therefore guaranteed to be accurate....

This degree of caution in the phrasing of the evidence would, it is argued, minimise the risk of the prejudicial effect outweighing the probative value. The jury would be in receipt of not only what the polygraph evidence may mean, but also the limitations of that opinion.

#### **7.4.2.1 Demeanour as an Indicator of Deceit?**

One of the key arguments against admitting polygraph evidence is that it usurps the function of the jury, but does the average jury need the help of experts or technology when deciding who is to be believed?

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<sup>737</sup> *R v S(VJ)* [2006] EWCA Crim 2389 [11]

It goes without saying that all jurors will have had experience of being lied to, but what is less clear is how good they are at detecting such lies. Arguably any competent jury can be relied upon to detect an implausible lie, or one that has been exposed by cross-examination or by calling other evidence to disprove it. But can a jury spot a plausible lie that cannot otherwise be disproved?

There is increasing recognition, both academically and judicially, that establishing lies from truth by observation is generally unreliable.<sup>738</sup> In the civil case *Liverpool Victoria Insurance Co Ltd v Yavuz* the High Court noted 'reliance on witness demeanour is notoriously unreliable'.<sup>739</sup> Noting this, for the courts, demeanour<sup>740</sup> is still regarded as a form of real evidence that may be relevant in establishing the weight that should be attached to a witness' evidence,<sup>741</sup> the current Crown Court Compendium for example includes the following optional jury direction:

The jury may take such notes as they find helpful. However, it would be better not to take so many notes that they are unable to observe the manner/demeanour of the witnesses as they give their evidence.<sup>742</sup>

The notion that demeanour may be taken as an indication of credibility was recently reaffirmed in an upper tribunal immigration case which determined that special arrangements should be considered to allow a witness who wore a full face veil to give evidence without veil to allow the panel to evaluate credibility.<sup>743</sup> This echoes the findings of HHJ Peter Murphy, in a 2014 criminal case, ruling that while a defendant could attend court in a full niqab, the face veil must be removed if she elected to give evidence.<sup>744</sup> Baroness Hale, speaking extra judicially, also said that judges must be able

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<sup>738</sup> A Roberts 'Case Comment Evidence: *R v Daley (Carlyle)*' (2018) 5 *Criminal Law Review* 403

<sup>739</sup> *Liverpool Victoria Insurance Co Ltd v Yavuz* [2017] EWHC 3088 (QB) [121]

<sup>740</sup> T Bingham *The Business of Judging: Selected Essays and Speeches* (Oxford University Press Oxford 2000), 6

<sup>741</sup> Blackstones 2019 Behaviour, Appearance and Demeanour F8.47

<sup>742</sup> Judicial College *Crown Court Compendium Part 1* (July 2019) at 3.1 pt23

<sup>743</sup> *AAN (Veil: Afghanistan)* [2014] UKHT 102 (IAC)

<sup>744</sup> M Dejevsky 'Beyond the veil: What happened after Rebekah Dawson refused to take her niqab off in court' *The Independent* (07/04/14)

to insist the veil is removed when giving evidence,<sup>745</sup> although it should be noted that more recently Lord Neuberger has called this into question.<sup>746</sup>

As yet there is no appellate decision regarding the removal (or otherwise) of the veil, and the current guidance from the Judicial College,<sup>747</sup> while noting the fallibility of evaluating credibility from demeanour, does little to clarify the situation. In the case of criminal trials the guidance notes:

As for those giving evidence, justification for removal of the veil requires close scrutiny. Judges should be particularly careful to point out that its wearing might impair the court's ability to evaluate the reliability and credibility of the wearer's evidence; jurors might assess what is said in ways that include looking at an individual's face and demeanour.<sup>748</sup>

While noting for non-criminal cases (thus without a jury):

A judge can ask anyone giving evidence to take off her veil whilst she gives that evidence, but only if a fair trial requires it... It should be done only if the judge reasonably believes it necessary in the interests of justice and only after reflection on whether, in the context, effective evidence could be given without removal.<sup>749</sup>

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<http://www.independent.co.uk/news/uk/home-news/beyond-the-veil-what-happened-after-rebekah-dawson-refused-to-take-her-niqab-off-in-court-9244409.html> accessed 02/01/16

<sup>745</sup> D Barratt 'Remove Muslim veil when giving evidence in court, says top woman judge' *The Telegraph* (12/12/14) <http://www.telegraph.co.uk/news/uknews/law-and-order/11290365/Remove-Muslim-veil-when-giving-evidence-in-court-says-top-woman-judge.html> accessed 2/01/16

<sup>746</sup> *The Guardian* 'Respect women's right to wear veil in court, says Britain's most senior judge' (17/04/15)

<http://www.theguardian.com/law/2015/apr/17/respect-womens-right-to-weir-veil-in-court-says-britains-most-senior-judge> accessed 2/01/16

<sup>747</sup> Judicial College Equal Treatment Bench Book February 2018

<sup>748</sup> *ibid* at 9.6 para 22

<sup>749</sup> *ibid* at 9.6 at para 15

Robson<sup>750</sup> commenting on the disparity between the directions suggests that a better option may be to permit the wearing of the veil where it has been requested and to direct the jury that this is not to affect their assessment of the evidence. A final observation with regard to the effect of the veil on judgment of truth telling, is a study by Leach et al.<sup>751</sup> which indicates that lie detection performance was improved in the presence of the niqab. The authors note that this is only an initial study, but, were such findings to be replicated, they would cast further doubt on the role of demeanour.

Although the preceding analysis indicates the recognition of the English courts that demeanor is no longer a reliable indicator (if it ever was) of deception the change is not universal with a recent judgment from the Canadian Supreme Court<sup>752</sup> that '[c]overing a witness's face may also impede credibility assessment by the trier of fact...'<sup>753</sup> and 'On the record before us, I conclude that there is a strong connection between the ability to see the face of the witness and a fair trial.'<sup>754</sup>

There are many factors the jury use to assess the credibility of the individual giving evidence, including demeanour. However, there is a substantial body of research which indicates that people are quite poor judges of whether an individual is truthful or not.

A substantial portion of communication is non-verbal,<sup>755</sup> and there are clear differences in the non-verbal cues between different cultures.<sup>756</sup> A US study<sup>757</sup>

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<sup>750</sup> J Robson 'Women should be allowed to wear the niqab in court – here's why' *The Conversation* (9 March 2018) <https://theconversation.com/women-should-be-allowed-to-wear-the-niqab-in-court-heres-why-92975> accessed 07/02/19

<sup>751</sup> AM Leach, N Ammar, ND England, LM Remigio, B Kleinburg and BJ Verschuere 'Less is More? Detecting Lies in Veiled Witnesses' (2016) 40 *Law and Human Behavior* 401

<sup>752</sup> *R v NS* [2012] 3 SCR 726

<sup>753</sup> *ibid* [25]

<sup>754</sup> *ibid* [27]

<sup>755</sup> M Argyle, V Salter, H Nicholson, M Williams and P Burgess 'The Communication of Inferior and Superior Attitudes by Verbal and Non-Verbal Signals' (1970) 9 *British Journal of Social and Clinical Psychology* 201

<sup>756</sup> M LaFrance and C Mayo 'Cultural Aspects of Nonverbal Communication' (1978) 2 *International Journal of Intercultural Relations* 71

highlighted this when evaluating the impact of race on non-verbal behaviours in encounters with the police. Logically, this could be seen to present difficulties to a jury of one ethnic group judging the demeanour of an individual from another ethnic background.

Looking more broadly, Vrij analysed 132 studies published in English and concluded that 'a cue akin to Pinocchio's growing nose does not exist'.<sup>758</sup> This finding echoes the earlier conclusion of Kraut<sup>759</sup> considering pre-1980 research that there are few behaviours consistently associated with deception – for example avoiding eye contact, fidgeting etc. – do not consistently indicate lying.

Vrij<sup>760</sup> also reviewed 79 studies, considering all aspects of communication, published in English since 1980, which concerned the ability of laypeople to discriminate between truth and lies being told by people they did not know. Excluding three studies (which Vrij defined as being outliers) the remaining ones indicated accuracy rates between 42-65% with the majority of the studies (62 of 79) indicating between 50-60%. The average accuracy across all 79 studies was 54.27%. This is comparable with the earlier paper where the average accuracy rate was 57%.<sup>761</sup>

It is important to note that these are not studies of juries in trials. They are typically academic studies conducted within universities, but what seems clear is that the ability of individuals to detect if another individual is truthful or not (in the absence of extraneous evidence) is little better than chance.

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<sup>757</sup> R Johnson 'Race and Police Reliance on Suspicious Non-Verbal Cues' (2007) 30 *Policing: An International Journal of Police Strategies & Management* 277

<sup>758</sup> A Vrij *Detecting Lies and Deceit Pitfalls and Opportunities* 2nd edn (Wiley Chichester 2008), 335

<sup>759</sup> R Kraut 'Humans as Lie Detectors: Some Second Thoughts' (1980) 30 *Journal of Communication* 209, 209

<sup>760</sup> A Vrij *Detecting Lies and Deceit Pitfalls and Opportunities* 2nd edn (Wiley Chichester 2008)

<sup>761</sup> R Kraut 'Humans as Lie Detectors: Some Second Thoughts' (1980) 30 *Journal of Communication* 209

Academic comment in legal journals has reflected the concerns raised by such papers. As far back as the 1990s, Stone<sup>762</sup> noted that there is ‘no sound basis for assessing credibility from demeanour’, and this was echoed by Blumenthal.<sup>763</sup> Coming up to date, Snook et al.<sup>764</sup> reviewed a number of meta-analyses and concluded that ‘most cues to deception are too faint for reliable detection, most facial expressions and other non-verbal cues are unrelated to deception, legal professionals (and others) are unable to accurately detect deception beyond chance levels.’

Thus, there is clear evidence going back many decades indicating that human beings, and thus members of the jury, are generally poor at determining truth from lies in the absence of other supporting information. As such, it seems there may logically be a role for the polygraph which – even on the poorest reliability estimate – is substantially better than chance at determining truth from lie.

#### **7.4.3 Implications of Refusal to Undertake a Polygraph**

If the use of the polygraph were to become widespread, even if not compulsory, a jury might be tempted to draw the inference that ‘if D is innocent, as he claims, he would then be willing to take a polygraph test; but he has refused to take one, so he must be guilty’. This concern was recognised in the previously discussed case *A v Germany*<sup>765</sup> (see 7.3).

For obvious reasons there is no English case law as to the inferences that may be drawn from such a refusal. There are, however, a number of arguably analogous situations which may serve as a guide as to the likely response of the courts to such a refusal should polygraph evidence become admissible. Those areas are:

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<sup>762</sup> M Stone ‘Instant Lie Detection. Demeanour and Credibility in Criminal Trials’ (1991) *Criminal Law Review* 821

<sup>763</sup> J 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* 1158

<sup>764</sup> B Snook, MI McCardle W Fahmy and JC House ‘Assessing Truthfulness on the Witness Stand: Eradicating Deeply Rooted Pseudoscientific Beliefs about Credibility Assessment by Triers of Fact’ (2017) 22 *Canadian Criminal Law Review* 297

<sup>765</sup> *A v Germany* (1984) 6 EHRR CD 360

- a) The right to silence
- b) Refusal to provide intimate samples; and
- c) Refusal to take part in an identity parade

#### 7.4.3.1 Right to Silence

The common law right to silence generally allowed no inferences<sup>766</sup> to be drawn from the accused exercising that right.<sup>767</sup> This has been seriously eroded by ss 34-37 of the Criminal Justice and Public Order Act 1994 (CJPOA) which allow such inferences to be drawn in many such cases, although the need for a *prima facie* case to be established means that silence cannot convert 'a case which is too weak to call for an answer into one which justifies a conviction'.<sup>768</sup>

The key provisions for this thesis are s34 (pre-trial silence) and s35.

Under s34(1) if the individual either under questioning or on being charged fails to mention something which they later rely on in court then 'the court or jury ...may draw such inferences from the failure as appear proper'. The Court of Appeal in *R v Brizzalari* noted clearly the primary function of s34:

...the mischief at which the provision was primarily directed was the positive defence following a "no comment" interview and/or the "ambush" defence.<sup>769</sup>

A particular concern for the courts has been to determine how to direct the jury when the defendant has remained silent following advice from a solicitor. The approach to be taken was affirmed by Woolf CJ in *R v Beckles*:

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<sup>766</sup> *R v Sparrow* (1973) 57 Cr App R 352 – the trial judge commented strongly and adversely on the defendant's decision to exercise the right to silence. The conviction was upheld at appeal, but noted that the judge had overstepped the limits of justifiable comment

<sup>767</sup> *Blackstones Criminal Practice 2019* The Right to Silence F20.2

<sup>768</sup> *R v Murray* [1994] 99 Cr App R 396, 400

<sup>769</sup> *R v Brizzalari* [2004] EWCA Crim 310



... in a case where a solicitor's advice is relied upon by the defendant, the ultimate question for the jury remains under section 34 whether the facts relied on at the trial were facts which the defendant could reasonably have been expected to mention at interview. If they were not, that is the end of the matter. If the jury consider that the defendant genuinely relied on the advice, that is not necessarily the end of the matter. It may still not have been reasonable for him to rely on the advice, or the advice may not have been the true explanation for his silence.<sup>770</sup>

Section 35 deals with the defendant being silent at trial and was examined in *R v Cowan*<sup>771</sup> which addressed the question as to the proper interpretation and implementation of s35 of the CJPO. The appellant argued that, by permitting adverse inferences to be drawn from the failure to testify, this in effect reversed the burden of proof. The Court of Appeal firmly rejected that argument, and reiterated that s38(3) of the 1994 Act prohibits conviction solely on the basis of an inference drawn from the defendant's silence.

It is the role of the judge to inform the jury when they may and may not draw inferences from that silence, but, as noted by Zander and Henderson,<sup>772</sup> jurors are likely in practice to draw adverse inferences 'whether they are instructed to do so or not' if they become aware that the defendant was silent in interview or if they have witnessed his failure to give evidence at trial.

#### **7.4.3.2 Refusal to Provide Intimate Sample**

The statutory framework set out in the Criminal Justice and Public Order Act 1994 in s54 addresses the provision of intimate samples as part of an investigation.

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<sup>770</sup> *R v Beckles* [2004] EWCA Crim 2766

<sup>771</sup> *R v Cowan* [1996] QB 373

<sup>772</sup> M Zander and P Henderson (1993) Crown Court Study. Royal Commission on Criminal Justice Research Study No 19 London HMSO cited in T Bucke, R Street and D Brown (2000) *The Right to Silence: The impact of the Criminal Justice and Public Order Act (1994)* Home Office Research Study 199

The leading case on the subject *R v Smith*<sup>773</sup> confirmed that inference could be drawn from the failure to provide a sample (in this case hair to be compared with that found at the scene of the offence). *Smith* is now confirmed in statute in PACE where the need for the police to advise a suspect of the possibility of adverse inference being drawn at trial in the event of refusal to provide the specimen is noted,<sup>774</sup> and in the event the case goes to trial PACE s 62(10) allows that:

Where the appropriate consent to the taking of an intimate sample...was refused without good cause...(b) the court or jury, in determining whether that person is guilty of the offence charged, may draw such inferences from the refusal as appear proper.

#### **7.4.3.3 Refusal to Take Part in Identification Procedures**

Code D of PACE sets the parameters for identification procedures, and the effect of refusal to consent to take part in one are clearly set out:

...the following shall be explained to the suspect...(v)that if they do not consent to, and co-operate in, a procedure, their refusal may be given in evidence in any subsequent trial and police may proceed covertly without their consent or make other arrangements to test whether an eye-witness can identify them.<sup>775</sup>

However, the situation with regard to refusal to take part in an identification parade is different to either the right to silent or refusal of intimate samples, in that limits are set on any inference that may be drawn. In *R v Karime*<sup>776</sup> the appellant had refused to participate in an identity parade, and the appeal was on the grounds that the trial judge had advised the jury that although the refusal to participate in the identification

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<sup>773</sup> *R v Smith* (1985) 81 Cr App R 286

<sup>774</sup> Police Station Adviser's Index 4<sup>th</sup> Edition Chapter 23, Section 3 – Intimate Samples - practical guidance

<sup>775</sup> PACE Code D 3.17(v)

<sup>776</sup> *R v Karime* [2004] EWCA Crim 512

parade did not in and of itself establish guilt, the jury was entitled to hold the refusal against the defendant, thus supporting the prosecution case. The Court of Appeal ruled that while the jury may be informed of the refusal, this cannot be held against the defendant. Their Lordships observing that:

Had the intention been that the jury should be entitled to draw adverse inferences from a failure to cooperate in the identification process, we have no doubt that Parliament would have spelt out that consequence and that procedures would have been introduced to ensure that the defendant fully understood the implications of any non co-operation.<sup>777</sup>

Thus, there appears to be a marked difference in the type of inference that can be drawn by failure to provide an intimate specimen as against refusing to consent to an identity parade.

Considering each of the above, what is worth noting that while every defendant has a choice whether to comment and answer questions in court or when first interviewed, defendants (and complainants or witnesses) would only exceptionally qualify for possible polygraph examination (as per *Bernal*<sup>778</sup>), so the absence of it might not be considered remarkable. But cases could still arise in which a polygraph might have been used, but the option was declined. It is arguable that should this situation arise *and* become public knowledge, there could be concerns as to the so-called CSI effect.<sup>779</sup> Members of the public are highly likely to have seen the polygraph being used on both daytime TV<sup>780</sup> and in numerous (predominantly US) TV shows<sup>781</sup> where the veracity of the technique is assumed.

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<sup>777</sup> *ibid* [15]

<sup>778</sup> *Bernal v R (Jamaica)*[1997] UKPC 18 [39]

<sup>779</sup> “The ‘CSI effect’ is a term that legal authorities and the mass media have coined to describe a supposed influence that watching the television show *CSI: Crime Scene Investigation* has on juror behavior. Some have claimed that jurors who see the high-quality forensic evidence presented on CSI raise their standards in real trials, in which actual evidence is typically more flawed and uncertain” TR Tyler, *Viewing CSI and the Threshold of Guilt: Managing Truth and Justice in Reality and Fiction* (2006) 115 *Yale Law Journal* 1050, 1050

<sup>780</sup> e.g. The Jeremy Kyle Show ITV talk show where participants undertake a lie detector test

<sup>781</sup> e.g. Homeland episode The Good soldier Season 1; Quantico episode Run Season 1

Although likely to be far from simple, both the concern that declining the polygraph indicates guilt and the CSI effect could be avoided if we were to follow the position of the Supreme Court of New Mexico in *Gutierrez*<sup>782</sup> where no reference would or could be made to the fact that the defendant had declined the polygraph, thus the jury would not be aware of the declined polygraph.

#### **7.4.4 Evidential Weight of Lies**

If a situation were to arise in which expert testimony was being given to the effect that the polygraph indicated deceit, could any evidential weight be attributed to this finding? In any criminal case, the possibility exists that either the accused or witnesses are lying. If that lie is connected to the offence, there may be, intuitively, a belief that this lie is relevant to the issue of guilt. However, there are many reasons that an individual may lie and extensive case law as to the evidential weight that can be attributed to lies.

In the leading case *R v Lucas*<sup>783</sup> the Court of Appeal held that the jury should be given a specific warning as to the use that could be made of lying on the part of the accused, this including the fact that people may lie for reasons which are innocent. The ruling was delivered at the time that the law often required corroborating evidence and corroborations were commonplace. The court ruled that, to amount to corroboration, a false assertion by the accused:

... must first of all be deliberate. Secondly it must relate to a material issue. Thirdly the motive for the lie must be a realisation of guilt and a fear of the truth. The jury should in appropriate cases be reminded that people sometimes lie, for example, in an attempt to bolster up a just

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<sup>782</sup> *State v Gutierrez* 2007 –NMSC-033, 142 NM. 1, 162 P3d 156 The New Mexico Supreme Court held that: ‘...prosecutorial comment on a defendant’s refusal to submit to a polygraph test is impermissible comment on a defendant’s right to silence in violation of the fifth amendment.’

<sup>783</sup> *R v Lucas* (1981) 73 Cr App R 159

cause, or out of shame or out of a wish to conceal disgraceful behaviour from their family.<sup>784</sup>

Arguably, this reasoning is somewhat circular. Subsequent cases listed the situations where a *Lucas* direction would generally be required have been identified,<sup>785</sup> and Phipson identifies the following as being the current circumstances under which a direction would be required:

1. where the defence relies on an alibi;
2. where a direction is given about the value of looking for evidence supporting a particular witness's testimony and the accused's lies or evasive behaviour might be treated as such supporting evidence;
3. where the prosecution seeks to rely on the lies in relation to a separate and distinct issue as evidence of guilt; and
4. where it is reasonably envisaged that the jury may treat the lies in relation to a separate and distinct issue as evidence of guilt even if the prosecution did not introduce them into evidence for this purpose.<sup>786</sup>

Thus a *Lucas* direction is not required in every case and in *R v Burge*<sup>787</sup> the Court of Appeal said:

... a *Lucas* direction is not required in every case in which a defendant gives evidence, even if he gives evidence about a number of matters, and the jury may conclude in relation to some matters at least that he has been telling lies. The warning is only required if there is a danger that they may regard that conclusion as probative of his guilt of the offence which they are considering.<sup>788</sup>

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<sup>784</sup> *ibid* 162-163

<sup>785</sup> *R v Adel Abdulwaheb Sunella* [2014] EWCA Crim 1870 is a recent case where the failure to deliver a *Lucas* direction resulted in the conviction being quashed

<sup>786</sup> Phipson on Evidence 19<sup>th</sup> Edition (Sweet and Maxwell, 2017), 16-09

<sup>787</sup> *R v Burge* [1996] 1 Cr App R 163

<sup>788</sup> *ibid* 172-173

The court also ruled that if possible a *Lucas* direction should be tailored to the circumstances of the individual case, but that in order for the jury to treat the lie as evidence of guilt they must be satisfied:

1. that the lie must be admitted or proved beyond reasonable doubt, and
2. that the mere fact that the defendant lied is not in itself evidence of guilt since defendants may lie for innocent reasons, so only if the jury is sure that the defendant did not lie for an innocent reason can a lie support the prosecution case.<sup>789</sup>

For the polygraph, the instrument will give readings that the expert opinion will interpret as:

Consistent with deceit (lying);

Consistent with truth; or

Not indicative either way.

If the result were indicative of deceit, it is argued a *Lucas* direction would certainly be required. The danger of a jury jumping to a premature conclusion about the significance of a failed polygraph test may in itself be a reason for insisting upon a *Lucas* direction – or possibly a modified version thereof. The mere fact that D fails a polygraph test cannot on its own be sufficient proof of the lie, but it may be seen as such in conjunction with other evidence. The need to ensure that excessive weight is not placed on the polygraph failure by the jury again links to the concern that public perception exaggerates the reliability of the results.

The primary potential use for the polygraph within this chapter has been argued as voluntary. This makes it intuitively more likely that the polygraph would be selected by those who believed they were innocent (or believed they could fool the polygraph) and the same argument applies. As such, while there is clear evidential weight to ‘a lie’ the polygraph will not provide meaningful support to that argument.

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<sup>789</sup> *ibid* 174

#### **7.4.5 The Laws of Evidence**

While it has been argued to this point that issues of reliability of polygraph evidence and the primacy of the jury are the main obstacles to expert opinion relating to polygraph evidence being admissible in the English courts, there is also the issue of the law of evidence which may be applicable. Should the point be reached where expert testimony regarding polygraph evidence was determined to be sufficiently reliable and probative the issues of admissibility under the rules of evidence would require consideration. Of particular relevance are:

- Hearsay
- Previous consistent statements
- Disclosure
- Right to silence/against self-incrimination

##### **7.4.5.1 Hearsay**

Considering first the situation with regard to the CJA, concerns that polygraph evidence would be inadmissible under the hearsay rule, it is argued, can be dismissed. There are many circumstances in which pre-trial statements by defendants, witnesses or 'absent witnesses' are already admissible under the provisions of the CJA 2003, s114(1)(a) to (c), and under s114(1)(d) a court also has a broad discretion to admit any other hearsay evidence, if it is in the interests of justice to do so. Roberts and Zuckerman, commenting on the changes to the law on hearsay under the CJA 2003, observe that the Act:

...entrusts trial judges with ample discretion to regulate the admissibility of hearsay evidence in broad compliance with the dictates of common sense and justice<sup>790</sup>

In the case of the polygraph itself, the analysis will either indicate that the individual was being deceitful, or it will not. It would focus not on the story told by the individual under test, but on the measured physiological reactions when s/he gave them. That

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<sup>790</sup> P Roberts and A Zuckerman *Criminal Evidence* (second Edition Oxford University Press 2010), 9.7

can be a subtle distinction, but it is a relevant one. No further level of hearsay is being added.

#### **7.4.5.2 Previous Consistent Statements**

As a general principle a witness called to give evidence is deemed to be a witness worthy of belief, as such the examiner in chief is not generally permitted to call evidence relating solely to their credibility.<sup>791</sup> A witness may seek to bolster their evidence by stating that they have previously made a similar statement but prior consistent statements are generally ruled inadmissible under the rule against narrative, which in the CJA 2003 has now been subsumed within the hearsay rule. This rule states:

(The) evidence of a witness cannot be corroborated by proving statements to the same effect made by him; nor will the fact that his testimony is impeached in cross-examination render such evidence admissible.<sup>792</sup>

Dennis<sup>793</sup> identifies two rules at common law which prevent the admission of such evidence: First the hearsay rule and, secondly, and of particular relevance to this section, is that such a rule prevents the admission of such evidence to show the witness's consistency. As with other forms of hearsay, however, there are various exceptions to the general rule, and a broad discretion to admit such evidence under s114(1)(d) if the interests of justice so demand.

If, as is argued within this chapter, the polygraph is no longer to be regarded as inherently inadmissible, it is possible to envisage cases in which both defendants and witnesses have undertaken a polygraph examination, the results from these examinations would then potentially have evidential status at trial.

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<sup>791</sup> | Dennis *The Law of Evidence* (Sixth Edition Sweet and Maxwell 2017), 14-005

<sup>792</sup> *R v Coll* (1889) 24 Ir 522 at [541] cited in May On Criminal evidence 6<sup>th</sup> edition Mainwork Part 6 20-02

<sup>793</sup> | Dennis *The Law of Evidence* (sixth edition Sweet and Maxwell 2017), 14-005



The standard rule is illustrated by the court's response to narrative evidence in *R v Roberts*.<sup>794</sup> Roberts was charged with murder having allegedly shot his former girlfriend. The defence was one of accident, and the defence sought to adduce evidence from Roberts' father to the effect that after his arrest he had told his father that the shooting had been an accident.

Evidence from his father as to whether the shooting was accidental would be hearsay evidence and thus inadmissible. The rejected defence argument was that he should still be allowed to give evidence of R's consistency, and indeed he would have been allowed to do that if the Crown had argued that the 'accident' claim was something R had invented only at some later stage. The common law rule then in force is now set out in s 120(2) of the CJA 2003.<sup>795</sup>

The Court of Appeal upheld the conviction with Humphreys J stating that 'the evidential value of such testimony is nil'.<sup>796</sup> This general rule was affirmed in *R v Oyesiku*.<sup>797</sup>

Roberts and Zuckerman note that difficulties can exist in identifying exceptions to the rule against narrative due to its entanglement with the law of hearsay.<sup>798</sup> They go on to note that:

The underlying principle ... was that previous consistent statements should exceptionally be admissible only in order to support the witness's credibility where, for some identifiable circumstantial reason, proof of

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<sup>794</sup> *R v Roberts* [1943] 28 Cr App R 102

<sup>795</sup> Section 120(2). If a previous statement by the witness is admitted as evidence to rebut a suggestion that his oral evidence has been fabricated, that statement is admissible as evidence of any matter stated of which oral evidence by the witness would be admissible.

<sup>796</sup> *R v Roberts* [1943] 28 Cr App R 102, 106

<sup>797</sup> *R v Oyesiku* [1972] 56 Cr App R 240, 245-247

<sup>798</sup> P Roberts and A Zuckerman *Criminal Evidence* (Second Edition Oxford University Press 2010) 8.3

consistency was not merely (almost) irrelevant narrative, but had genuine probative value in determining disputed questions of fact.<sup>799</sup>

It is worthy of note that there is some recent indication are that the Court of Appeal may no longer treat the rule against narrative with the gravity it was formerly accorded. In *R v Avery*<sup>800</sup> the Court of Appeal ruled that an objection that a complainant's previous statement failed to meet the requirements of s120 was 'technically good'. However a previous consistent statement is more indicative of the weight of the other evidence in the case rather than a view on the admissibility of the evidence, despite the jury having been incorrectly directed that they could rely on the out of court complaints as evidence of their truth.<sup>801</sup>

The existing common law exceptions to the rule were amended by s120 of the Criminal Justice Act 2003. The statutory exceptions contained within this section do not open an obvious route for the admission of polygraph evidence.

If, however, a previous consistent statement is ruled admissible, polygraph evidence relating to it adds no further element of narrative or hearsay. It is a separate form of evidence dealing with physiological responses. In the dissenting judgment in the previously noted case *Béland Wilson J* argued that polygraph evidence was not simply a repetition of statements made by the accused at trial. On the notion of oath helping she stated:

The connection between oath-helping and the admissibility of polygraph evidence seems to me to be very tenuous ... The polygraph operator, ..., has subjected the accused to a number of tests. He reports on the results of these tests and gives his expert opinion as to whether the physiological reactions of the accused are similar to those of someone telling the truth. He is open to cross-examination ... His evidence is only one of the many

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<sup>799</sup> *ibid* 8.3

<sup>800</sup> *R v Avery* [2007] EWCA Crim 1830

<sup>801</sup> *ibid* [15]

factors the jury will consider when assessing the credibility of the accused.<sup>802</sup>

And on the topic of prior consistent statements:

It is expert evidence on how closely his physiological responses during the test correspond to those of someone telling the truth.<sup>803</sup>

Considering this judgment, Chandler<sup>804</sup> argues that physiological responses which underpin polygraph evidence go beyond simply repeating previous statements and that as such this is not a ground for excluding polygraph evidence.

#### **7.4.5.3 Disclosure**

With the use of the polygraph now part of licence conditions under s30 of the Offender Management Act 2007, an interesting potential question arises in relation to disclosure. Spruijn et al.,<sup>805</sup> evaluating the experiences of sexual offenders who have this element as one of their licence conditions, note that ‘nearly half of the offenders undergoing polygraph testing talked about making more risk-relevant disclosures (e.g. increased access to children and contact with other sexual offenders), *during polygraph sessions [author italics]*.’<sup>806</sup>

What then happens if, during a polygraph session, the offender identifies/implicates another individual such that a police investigation is triggered which leads to charges and proceedings against that individual? Could that individual (D2) expect information as to the polygraph which was the trigger event in the investigation being disclosed so that s/he could challenge the reliability?

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<sup>802</sup> *R v Béland* [1987] 2 SCR 398 [26]

<sup>803</sup> *ibid* [34]

<sup>804</sup> J Chandler ‘Reading the Judicial Mind: Predicting the Courts’ Reaction To The Use Of Neuroscientific Evidence for Lie Detection’ (2010) 33 *Dalhousie Law Journal* 85

<sup>805</sup> E Spruijn, J L Wood, TA Gannon and N Tyler ‘Sexual Offender’s Experiences of Polygraph Testing: a Thematic Study in Three Probation Trusts’ (2017) 3 *Journal of Sexual Aggression* 1

<sup>806</sup> *ibid*, 10-11

It is useful to first examine the statutory framework for disclosure of evidence. This is contained within the Criminal Procedure and Investigations Act 1996 (the CPIA) and the CPIA Code of Practice. Within s3 of the CPIA the prosecutor must:

1(a) disclose to the accused any prosecution material which has not previously been disclosed to the accused and which might reasonably be considered capable of undermining the case for the prosecution against the accused or of assisting the case for the accused, or

(b) give to the accused a written statement that there is no material of a description mentioned in paragraph (a).<sup>807</sup>

For the accused, the disclosure required under the act stipulates that a written defence statement 'setting out the nature of the accused's defence...'<sup>808</sup> is disclosed to the prosecution. Thus, while the disclosure requirements are much greater on the part of the Crown the aim of the CPIA is:

[To] ensure that criminal investigations are conducted in a fair, objective and thorough manner, and requires prosecutors to disclose to the defence material which has not previously been disclosed to the accused and which might reasonably be considered capable of undermining the case for the prosecution against the accused or of assisting the case for the accused.<sup>809</sup>

The rules for disclosure are addressed in Part 15 of the CrimPR, and more specifically in relation to expert testimony disclosure, CrimPR 19.3(3)(c) which 'requires a party who introduces expert evidence to give notice of anything of which that party is aware

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<sup>807</sup> Criminal Procedures and Investigations Act 1996 s3(1)

<sup>808</sup> CPIA 6A(1)(a) Contents of Defence statement

<sup>809</sup> Attorney General's Office. Attorney General's Guidelines on Disclosure December 2013, 4

which might reasonably be thought capable of undermining the reliability of the expert's opinion, or detracting from the credibility or impartiality of the expert...'810

Returning to the hypothetical disclosure within the polygraph examination, there are two primary scenarios to consider:

1. Working on the assumption that the crime which is disclosed is a sexual offence, there would be a requirement to locate the victim. If the victim gave a statement, that would become the main evidence against D2. The first defendant may give evidence which corroborates it. If they have previously 'passed' a lie detector test when giving that account, the prosecution would not be able to rely on that fact. If the first defendant had failed that test, that would almost certainly fall to be disclosed under s3 of the CPIA. However, in those circumstances it would be unlikely the prosecution would call the first defendant as a witness if the victim was credible enough.

2. If a victim was not located, and it was effectively the word of one defendant against another, regardless of the result of the polygraph, the prosecution would be very unlikely to charge D2. Given the current (presumed) inadmissibility of polygraph evidence, if this were in effect the only evidence, the likelihood of the case reaching either the threshold or full code test as per the Code for Crown Prosecutors<sup>811</sup> is highly unlikely. If such an unlikely situation arose whereby the Crown called that convicted offender as their key witness to give live evidence at trial, it would arguably be unfair not to let the jury know that he failed the polygraph test when first implicating the current accused.

In such a situation where it is effectively one person's word against another (even at the investigatory stage) it is perhaps worth revisiting Lamer and Wilson JJ's dissent in the Canadian case *Béland* (7.1.2) arguing that:

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<sup>810</sup> Crim PD 19A.7

<sup>811</sup> The Code for Crown Prosecutors 4.1 – 5.11 Published 26 October 2018

<https://www.cps.gov.uk/publication/code-crown-prosecutors#section4> accessed 19/07/19

The central issue was whom to believe ... There was no other evidence implicating the respondents in the alleged conspiracy. It would be unjust, in these circumstances, to prevent the respondents from calling any evidence of probative value indicating they were telling the truth.<sup>812</sup>

In the unlikely event of such a case reaching the courts if D1 had passed the polygraph the prosecution would not be able to refer to this in court as it would offend the rule against oath-helping. If the fact of the polygraph was disclosed to the defence, it seems likely they would not want the jury to know there was a positive test in the first place.

If the test was failed then the results would potentially be disclosable.

Currently, it seems likely that the CPS would only charge a defendant in these circumstances if there was the most overwhelming corroborative evidence to show that the polygraph result could be discounted. If there was evidence of this quality, they would proceed without using D1's evidence.

#### **7.4.5.4 Section 129 CJA – Representations other than by a person**

If polygraph evidence were to be adduced it would be evidence obtained from a mechanism and thus 'other than a person' as per s129 of the CJA. Implicit within s129 is the issue of reliability. This relevant section stipulates that:

(1)Where a representation of any fact—

(a) is made otherwise than by a person, but

(b) depends for its accuracy on information supplied (directly or indirectly) by a person,

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<sup>812</sup> *R v B eland* [1987] 2 SCR 398, 400

(c) the representation is not admissible in criminal proceedings as evidence of the fact unless it is proved that the information was accurate.

(2) Subsection (1) does not affect the operation of the presumption that a mechanical device has been properly set or calibrated.

The devices used to measure the physiological changes which take place in the course of the polygraph utilise well established technology which is widely used in both healthcare and research.<sup>813</sup> It is argued that the requirement for the information to be supplied being accurate as per s129 (1)(b) is readily met with the usual servicing and calibration requirements that are scheduled for items of medical and research equipment.

Pattenden<sup>814</sup> notes that despite the widespread use of digital technology, there has been little case law or commentary with regard to s129. Although Pattenden was writing nine years ago, the current situation is little different. The leading case<sup>815</sup> with regard to this section of the CJA is *Public Prosecution Service v McGowan*<sup>816</sup> in which an element within the prosecution case was that a till roll seized by the police showed that a sale of alcoholic liquor had been made some 40 minutes after the time of day when it was lawful to sell intoxicating liquor.

The court considering art.33 of the Criminal Justice (Evidence)(Northern Ireland) Order 2004/ 1501<sup>817</sup> noted that:

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<sup>813</sup> Sphygmomanometers measuring blood pressure have been in widespread use since early in the last century, with the equipment used to make the measurements constantly being upgraded (J Booth A Short History of Blood Pressure Measurement *Proceedings of the Royal Society of Medicine* 70(Nov 1977), 793

<sup>814</sup> R Pattenden 'Machinespeak: Section 129 of the Criminal Justice Act 2003' (2010) 8 *Criminal Law Review* 623

<sup>815</sup> This was the only case that could be located via Westlaw UK or Lexis, and Pattenden above also identifies it as the leading case

<sup>816</sup> *Public Prosecution Service v McGowan* [2008] NICA 13 – Westlaw database records two other cases where this case was applied, neither of these were with regard to art 33. Cases are *Public Prosecution Service v Duddy* [2008] NICA 18 and *DPP v Smylie* [2012] NICA 45

<sup>817</sup> The wording of art.33 is identical to the wording of s129 of the CJA 2003 as given above

In the modern world the presumption of equipment being properly constructed and operating correctly must be strong. It is a particularly strong presumption in the case of equipment within the control of the defendant who alone would know if there was evidence of incorrect operation or incorrect setting.<sup>818</sup>

Although the case concerned a till roll, the judgment talks about equipment in the broader sense with the presumptions that equipment is operating correctly.<sup>819</sup> This being the case, although the questions as to the accuracy of the reading indicating what the expert states they do remains, it is argued that accuracy of the equipment used to obtain the measurements in the polygraph would be difficult to challenge, although one assumes there would be a requirement on the part of the polygrapher to produce evidence as to the correct maintenance and calibration of the equipment

#### **7.4.6 Practical Concerns**

As has been demonstrated in some jurisdictions, such as the US, the use of the polygraph is widespread. Its use in recruitment to federal agencies and within the criminal justice systems in some states extends to it being admissible in court. Extensive use is also made of the polygraph, in some states, within the investigation.

Could a similar approach be taken in England and Wales? If one is to look broadly at the pre-trial or investigative section of a criminal case, the notion that the police could use the polygraph for investigation is deemed inadvisable by the Association of Chief Police Officers (ACPO). In a 2014 position paper<sup>820</sup> they deemed the use of the polygraph inappropriate, citing concerns as to the integrity of the investigative process, and expressing the opinion that the use of a polygraph during the

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<sup>818</sup> *Public Prosecution Service v McGowan* [2008] NICA 13 [20]

<sup>819</sup> A similar presumption was evidenced in the earlier case *Cracknell v Willis* [1988] AC 450 at 468 noting 'the presumption of law is that the [police station breath testing] machine is reliable.'

<sup>820</sup> Association of Chief Police Officers *National Policing Position Statement: The Use of the Polygraph in Investigations* (May 2014)



investigation would have to be shared with the CPS, and probably be disclosed to the defence, thus potentially giving rise to challenge as to reliability within the trial process. The position paper concludes that 'at best the polygraph will not get the investigation any further forward and at worse it could discredit it leading to a situation in which victims of crime are needlessly denied justice.'

The courts are an organ of the state; they are publicly funded and as such there is a need to be as effective and cost efficient as possible. The Law Commission notes its function is to 'seek to ensure that the law is as simple, accessible, fair modern and cost effective as possible'.<sup>821</sup> As such even if an argument can be made legally that the polygraph should or could be admissible would practical concerns inhibit such a move?

As noted earlier in this chapter Danaher considers the use of P300 brain-based lie detection and argues that the place for such evidence should not be within the trial, but rather in *pre-trial* plea bargaining.<sup>822</sup> The practice of plea bargaining, whereby the accused pleads guilty to a lesser offence rather than go before the jury is prevalent in the US. Danaher argues that the approach better enables innocent defendants to argue their innocence at the plea bargaining stage, thus potentially making their claim of innocence more credible, rather than an innocent person pleading guilty to a lesser offence to avoid the possibility of a much longer sentence if they go to trial and are found guilty.

Such an approach could presumably save both court costs if avoiding a trial and imprisonment and wider social costs of miscarriages of justice.

The situation in the UK is different, in that there is not a system of plea bargaining comparable to that in the US. However, there are conditions under which an individual

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<sup>821</sup> Law Commission Annual Report 2014-15, 9

<sup>822</sup> J Danaher 'The Comparative Advantage of Brain Based Lie Detection: the P300 Concealed Information Test and Pre-Trial Bargaining' (2015) 19 *International Journal of Evidence and Proof* 52

can plead guilty to a lesser offence,<sup>823</sup> or possibly, and more speculatively, where the CPS may feel that if the evidence is weak, coupled with a suspect passing a polygraph—could the decision be made that the evidence no longer reaches the threshold for charging?<sup>824</sup> The reverse of this argument could be where the evidence is sufficient to meet the threshold test, and the accused then passes a polygraph indicating no deceit. Could the prosecutor then determine that this weakens the overall case against the accused and thus not charge? This becomes something of a circular argument, the best figures of polygraph reliability are less than 100%, so while the polygraph may strengthen or weaken a case, it is never possible to be sure that, whatever the outcome, the polygraph is right.

Such points are obviously speculative at best, and considering the requirement under the code<sup>825</sup> that the prosecutors assure themselves of the reliability of any evidence, it seems probable that the concerns regarding the reliability of the technique may preclude its consideration.

It is perhaps helpful at this point to remind oneself, that while the prosecution has to prove the case on the totality of the evidence ‘beyond reasonable doubt’ the defence needs only to introduce an element of ‘reasonable doubt’ and it may well be that the polygraph could achieve precisely that.

As the courts have no power to exclude defence evidence under s78 of PACE, if the polygraph were to become admissible there could be a concern about partial pro-defence polygraph evidence. However, it is argued that the need to control the quality of any polygraph expert evidence coming before the courts would most appropriately

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<sup>823</sup> *Blackstones Criminal Practice 2019* D12.79 Where the indictment contains a count on which, if the accused were to plead not guilty, the jury could find him not guilty as charged but guilty of an alternative (hereafter referred to as ‘lesser’) offence, he may enter a plea to the same effect, namely not guilty to the offence charged but guilty only of the lesser offence (CLA 1967, s. 6(1)(b)).

<sup>824</sup> The Code for Crown Prosecutors – The Threshold Test- 26 October 2018  
<https://www.cps.gov.uk/publication/code-crown-prosecutors> accessed 05/08/19

<sup>825</sup> Crown Prosecution Service ‘The Code for Crown Prosecutors’ 2018, 4.8  
<https://www.cps.gov.uk/publication/code-crown-prosecutors#section4> accessed 19/07/19

be managed by way of training and accreditation of the polygrapher operators, and also by way of the CrimPR. As with any expert giving testimony, the polygraph operator will be bound by the rules. The issue of training and accreditation is addressed shortly in section 7.5 of this thesis.

The argument that the polygraph is 'impractical' is a further concern. Referring back to Justice Thomas's comment in *Scheffer* – that rule 707 serves a legitimate interest in 'avoiding litigation over matters other than guilt or innocence' – the additional costs and delays that such evidence could introduce become a real concern.

Evidence from the US clearly illustrates this. Following the re-introduction and reconsideration of polygraph evidence followed the overturning of the *per se* ban (following *Frye*) by the Supreme Court judgment in *Daubert*, a number of states permitted, but then ceased to allow, polygraph evidence. Interestingly, both Wisconsin and North Carolina appear to have re-instated the bar on polygraph evidence because of the burdens placed on the courts. In *State v Grier* the court concluded that:

[W]e are forced to conclude that the administration of justice simply cannot, and should not, tolerate the incredible burdens involved in the process of ensuring that a polygraph examination has been properly administered. If a trial court were to adequately police the reliability of stipulated results the time required to explore the innumerable factors which could affect the accuracy of the particular test would be incalculable.<sup>826</sup>

Although this clearly indicates concerns regarding reliability, it also seems to echo Justice Thomas's previously noted concern in *Scheffer* that courts could end up litigating about matters other than guilt or innocence.

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<sup>826</sup> *State v Grier* 307 NC 628, 643, 300 SE2d 351 (1983)

Arguably even more practical than the concern of ‘clogging up the courts’ is that if one returns to some of the techniques which claim ever greater accuracy, such as combining fMRI with the polygraph,<sup>827</sup> an obvious limiting factor becomes the availability of the equipment. MRI scanners currently are large expensive machines with running costs of hundreds of thousand pounds per year. Such machines are typically used for research and clinical indications, the likelihood of such equipment being made available and the question of how it would be paid for, seem likely to make the adoption of such techniques, at best, extremely unlikely.

### **7.5 Evolution or Legislation: Introducing Polygraph Evidence into the English Courts?**

The analysis within this chapter, it is argued, indicates that there is a clear argument in logic supporting the admissibility of polygraph evidence, and further that the rules of evidence which could be presumed to block such evidence are navigable. It is however argued that a more deliberate effort than simply ‘working round’ the existing rules is required.

Given the many subsidiary issues identified which accompany such a proposal, and polygraph evidence more generally, the question which must arise is would any court ever take up the challenge of admitting such evidence? It may be that if such evidence were ever to be considered the more appropriate route would be via legislation.

While there is no requirement for a Law Commission review prior to legislative change, such a review has the advantage of being seen as open and inclusive by virtue of seeking views from interested parties, and also, as with recent consultations, evaluating the situation in other jurisdictions. Thus it is argued that the introduction of the polygraph would be sufficiently controversial and polarising as to require a Law Commission review potentially leading to a draft bill, much as with CP190/LC325.

I would argue that any possible polygraph consultation/legislation would need at a minimum to address the following points:

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<sup>827</sup> NJ Gordon, FB Mohamed, SM Platek, H Ahmad, J M Williams, SH Faro ‘The Effectiveness of fMRI Data when Combined with Polygraph Data’ (2018) 12 *European Polygraph* 19

- a) In what situations could a polygraph be appropriate?
- b) Who could be offered a polygraph, and what are the implications of refusal?
- c) Implications of pass and fail at trial
- d) Training and accreditation of the polygrapher

#### **a) In What Situations Could a Polygraph be Appropriate?**

The polygraph is a time consuming procedure. The BPA indicate a properly conducted polygraph examination will take at least two to three hours.<sup>828</sup> As such it would seem undesirable to have legislation which allows every suspect, defendant or witness to be offered a polygraph. Access to appropriately qualified examiners and appropriate devices would become hugely problematic and the cost implications would be severe.

It is more likely that any such legislation would restrict polygraph evidence to a narrowly defined category of cases. If we revisit Lamarr and Wilson JJ's dissent in the Canadian case *Béland* (see 7.1.2 and 7.4.5.3) the argument made was that the polygraph was potentially useful where the case was one person's word against another. This being the case, a possible category where this could be relevant is where the case concerns rape or sexual assault, be that historic or current. In such cases there is often little or no other evidence available beyond the testimony of the complainant and the denials of the accused,<sup>829</sup> one of whom must be lying.

It is suggested that a threshold would need to be established, and that offence type may well be a suitable starting point.

#### **b) Who Could be Offered a Polygraph, and What are the Implications of Refusal?**

It would seem logical that the polygraph could be offered to the accused, and key witnesses, including the complainant.

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<sup>828</sup> The British Polygraph Association 'The Polygraph Test'  
<https://www.britishpolygraphassociation.org/test.html> accessed 6/10/19

<sup>829</sup> R Buxton 'Victims as Witnesses in Trials of Sexual Offences: Towards Equality of Arms'  
(2015) 9 *Criminal Law Review* 679

## The Accused

Under any such legislation it would be anticipated that the polygraph examination would almost certainly be optional, not mandatory. As noted in the majority of areas examined the polygraph is inadmissible, as such compulsory use does not even feature. Interestingly *Selvi v State of Karnataka*, a case from the Indian Supreme Court, did consider the issue of compelled polygraph testing within the investigatory phase/pre-trial and held that it would be unconstitutional<sup>830</sup> citing Article 20(3) of the Indian Constitution:<sup>831</sup>

No person accused of any offence shall be compelled to be a witness against himself.

If we accept that any polygraph examination covered by such legislation will require the subject's consent, the next issue is what inferences, if any, may be drawn from a refusal to take such a test. In analogous situations involving a defendant's failure or refusal to answer questions or disclose his defence at interview, to give evidence at trial, to provide an intimate sample or to take part in an identity procedure, the force of the inference (if any) that can be drawn varies considerably.

Any legislation would have to determine what level of inference could be drawn from refusal. I would suggest that the most closely aligned refusal is perhaps that of refusal to provide an intimate sample as examined previously (7.4.3.2). The intimate sample being refused is the refusal to permit the analysis of a physiological response.

It is suggested that a permutation which would require further consideration is if the defendant were to decline the polygraph offered by the police, but then have a polygraph undertaken at the behest of the defence. Under s78 of PACE this is likely to be admissible, but then arguably the defendant's actions may fall under s34 of the CJPOA in that he would be relying on something he failed to mention and then later relied on in court, and thus again inferences may be drawn.

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<sup>830</sup> *Selvi & Ors v State of Karnataka* [2010] 5 LRC 137 [221]-[223]

<sup>831</sup> The Constitution of India

## Witnesses

In the case of witnesses, the Ministry of Justice Guidance on Achieving Best Evidence (ABE) sets out the general position very clearly:

2.10 Where a witness is competent to give evidence they are usually also compellable. This means that they can be legally required to attend trial. In general, however, the fact that a witness is compellable does not mean that they can be legally required to give any kind of preliminary statement to the police – even the sort of statement that is made under this guidance.<sup>832</sup>

In the event that a witness has been interviewed and then refuses to make a statement, the guidance is that the CPS should be advised.<sup>833</sup>

Thus as the accepted position is that a pre-trial/investigatory polygraph cannot be mandated, the situation possibly would be that the CPS be advised that the witness turned down the option of the polygraph.

A point which needs to be acknowledged is that if the victims of alleged sexual assault were asked if they were prepared to take a polygraph it is probable that considerable adverse comment would arise (however well or poorly informed) in wider society and the media. One has only to look at the furore that arose over the concern that the police would not pursue rape allegations unless complainants handed over their mobile phones.<sup>834</sup> In this case, efforts by the CPS<sup>835</sup> to clarify the situation and correct

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<sup>832</sup> Ministry of Justice *Achieving Best Evidence in Criminal Proceedings* (March 2011)

<sup>833</sup> College of Policing (2018) Working with victims and witnesses – 3.9 Witness refusal to make a statement <https://www.app.college.police.uk/app-content/investigations/victims-and-witnesses/#witness-refusal-to-make-a-statement> accessed 19/09/19

<sup>834</sup> C Barr 'People who report rape face 'routine' demands for their mobile data' *The Guardian* (21/09/19) <https://www.theguardian.com/society/2019/sep/21/people-report-rape-routine-demands-mobile-data> accessed 26/09/19; *BBC News* 'Rape cases dropped over police phone search demand' (23/07/19) <https://www.bbc.co.uk/news/uk-49072302> accessed 26/09/19

<sup>835</sup> Crown Prosecution Service 'Handing over mobile phone data in rape prosecutions' (13/05/19) <https://www.cps.gov.uk/cps/news/handing-over-mobile-phone-data-rape-prosecutions> accessed 26/09/19

inaccuracies in the coverage were arguably not that effective, as adverse media coverage continues to appear some months later. It seems likely that the furore over mobile phones would be minor compared to the likely narrative of press coverage that rape victims are being 'forced' to undergo a lie detector test.

### **c) Implications of Pass and Fail**

If the polygraph were to be used as suggested in the case of alleged rape or sexual abuse then it is arguable that its greatest impact could be in those cases where the overall evidence is weak and, aside from circumstantial evidence, it is in effect one person's word against the other. In such a case it could be that a passed polygraph (on the part of the accuser) and a failed one on the part of the accused would be seen as sufficient to bolster an otherwise weak case to meet the threshold test for charging.

By the same count it may be that a passed polygraph on the part of the accused and/or a failed one on the part of the accuser would be sufficient for the case to fail to meet the threshold test.

If expert evidence relating to the physiological changes in response to questions was to be presented as simply another element of evidence, with the expert highlighting relevant information with regard to reliability rates, then it is argued that pass or fail is in some senses irrelevant. It will be for the jury to attribute the appropriate weight to that evidence.

The expert presenting the evidence will point out the issues around the reliability of the technique as per the requirements of r19.4, however the public profile and understanding of the technique is such that it is likely that the polygraph equivalent of a *Turnbull* direction may be required to make absolutely clear to the jury what weight could be attributed to such evidence.



#### **d) Training and Accreditation**

This would arguably be the most straightforward element. The current polygraph rules which are applicable to polygraph testing under the Offender Management Act 2007 stipulate that:

3.—(1) A polygraph operator will be suitably qualified if the polygraph operator has—

(a) completed the following courses—

(i) a polygraph training programme accredited by the American Polygraph Association; and

(ii) a post-conviction sex offender testing training programme accredited by the American Polygraph Association; and

(b) carried out a minimum of 20 post conviction sex offender testing polygraph examinations under the supervision of an American Polygraph Association examiner.<sup>836</sup>

The British Polygraph Association (BPA) notes that all its members have graduated from schools accredited by the American Polygraph Association (APA).<sup>837</sup> The British and European Polygraph Association (BEPA) while not stipulating all members will have qualified via a training facility accredited by the APA do state that this is preferable.<sup>838</sup>

If the standards set by the APA are deemed sufficient to meet the requirements of statute within the polygraph rules it would seem both logical and pragmatic that this could carry over into any proposed legislation.

Rigorous policing of these standards would be required if one is to avoid the risks noted within *Scheffer* of litigation over matters other than guilt or innocence (7.1.2). Whether this could be attributed to a regulatory body such as the BPA is uncertain.

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<sup>836</sup> The Polygraph Rules 2009/619 s3

<sup>837</sup> The British Polygraph Association The Constitution and Articles of Association of the British Polygraph Association April 2015

<sup>838</sup> *ibid*

While there is an intuitive appeal to such a programme being centrally managed to ensure standards, if one notes the demise of the FSS, this does not appear to be a direction of travel currently in favour with the legislature.

## **7.6 Conclusion**

Should an occasion arise wherein a party sought to adduce expert evidence from a polygraph test, as the preceding chapter has shown the obstacles to admitting that evidence are considerable.

The first question as per *Turner* must be would such evidence be helpful/necessary? The evidence would seem to indicate that the ability of a jury to assess if an individual is untruthful is often little better than chance. Even the most critical studies as to the reliability of the polygraph seem to indicate that it can deliver results that are considerably better than chance. How then do we argue to continue to exclude the more reliable indicator of truthfulness and prefer the less reliable one?

If the evidence is determined to meet the threshold of the *Turner* test, the question then becomes one of does the evidence meet the requirements of the rules of evidence? The preceding analysis indicates that any concern that it could fail on the basis of being information other than by a person (s129) is addressed by current case law and should not be problematic. The issue of such evidence being hearsay and thus inadmissible is also addressed by careful presentation of the evidence and the application of the 'safety valve' of s114d. The rule against prior consistent statements is problematic, but both the minor flexibility shown by the Court in *Avery* (7.4.5.2) and the argument that, rather than a prior consistent statement, the evidence is around a physiological response may provide a route through.

Moving then to the guidance within Rule 19 of the CrimPR, as noted within 7.4.1 there is no reason to believe that expert testimony as to the technical details of and outcome of the polygraph would not meet the requirements of the rule, with the weight to be attributed to such evidence to be determined by the jury.

This logically also brings the discussion to the fundamental concern as to the reliability of the technique. As noted previously, McIntyre J in *R v Béland*<sup>839</sup> did not accept that a finding of significant errors would by itself be enough to exclude polygraph evidence from the courts. Thus while the bulk of judicial opinion seems averse to the introduction of the polygraph, I would argue that while the rationale given seems to relate most clearly to the reliability of the instrument, this is actually secondary to the greater objection, that of supplanting the function of the jury.

The assumption that polygraph evidence is inadmissible has been drawn from judgments in other common law jurisdictions. Even amongst these rulings there is some judicial support for the notion that the polygraph could under some circumstances be admissible. *Bernal* is of particular interest, being a Privy Council case in which UK justices do not exclude the *possibility* of such evidence being admissible in *exceptional* circumstances.

However, even if a route has been determined which would permit such evidence the question then becomes just because we can, should we? The issue of public perception and understanding of the polygraph would seem to be a clear concern in the prejudicial v probative debate which has to be applied.

Challenges to the admissibility and reliability of the technique would arise, further expert opinion may be adduced. This is likely to have the result of slowing the court processes further, and funding for this would likely come via the public purse either from the CPS or via legal aid. With the recent and ongoing cuts the legal aid budget<sup>840</sup> it may be that the public policy decisions of the courts will continue to weigh against the admissibility of such evidence, however robust (or otherwise) any argument may be for admission.

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<sup>839</sup>*R v Béland* [1987] 2 SCR 398 [19]

<sup>840</sup> e.g. J Robins 'Dark Days for Legal Aid' (2018) 168 (7786) *New Law Journal* 7

It is at least in part to address this issue of subsidiary litigation that the possibility of legislation should be considered. While it may in theory be possible to ‘work around’ the rules of evidence, if a detailed review as per CP190 were to be undertaken then issues around reliability, admissibility, technique and weighting would already have been addressed and set within a statutory framework before the evidence was adduced.

So the question remains will the polygraph ever reach the English courts? With the perhaps, slightly ironic, exception of serious sexual offenders there is no statutory bar to the admission of polygraph evidence in the English and Welsh courts.

Considering the statutory ban under s30, the ban applies only to the use of the polygraph in criminal proceedings against that individual. In a New Mexico case, *Baca*<sup>841</sup> the defendant sought (successfully) to adduce the outcome of the polygraph taken by his co-defendant. It is not difficult to picture an analogous situation here, where serious sexual offenders may seek to adduce the polygraph results of a partner in offending. If this approach were taken it could ‘side step’ the statutory ban and as per PACE s78 if evidence is admissible then the judge has no discretion to exclude it if it is being adduced by the defence.

As with the concerns regarding ‘trial by expert’ it is possible that underlying the reluctance to accept polygraph evidence is the fear, so beloved of dystopian sci-fi, of ‘trial by technology’,<sup>842</sup> of losing the common sense of the 12 good men and true.

The role of the judge and jury is to analyse the many discrete items of evidence to reach a final decision. Expert evidence, such as the polygraph, forms just one of those elements, that as with any expert evidence a jury is free to accept or disregard. The Court of Appeal in *R v Stockwell*,<sup>843</sup> considering the decision of the trial judge to admit

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<sup>841</sup> *State v Baca* 120 NM 383, 902 P.2d 65 (1995)

<sup>842</sup> e.g. *Demolition Man* (Film-1993); *Blake’s 7* pilot episode (TV Series-1978); *Star Trek* court martial episode (TV Series-1967)

<sup>843</sup> *R v Stockwell* (1993) 97 Cr App R 260

evidence of a facial mapping expert, held that not only was the evidence admissible, but highlighted the importance of the jury being told they are not bound by the opinion of the expert and that the issue is for the jury alone to decide. This being the case, it is difficult to see how the opinion of the expert, where the testimony is admissible, can be said to usurp the opinion of the jury.

The courts are unequivocal that the law should be open to changes in scientific practice and new and novel ideas<sup>844</sup> and it may be that, in the final analysis, the acceptance of polygraph evidence in the criminal courts is as much about a shift in legal culture as it is about a change in the law, but as is oft noted one of the great strengths of the common law is its adaptability.

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<sup>844</sup>*R v Clarke* (1995) 2 Cr App R 425 430

## Chapter 8

### Evaluation, Conclusion, and Recommendations

#### 8.0 Introduction

In this thesis I argue that we should be moving towards a more rational use of expert evidence to better aid the jury in reaching a just and rational outcome. Both the case studies and the wider consideration of the rules, and the application of the rules relating to expert evidence demonstrate that in a number of areas this rationality is lacking.

The case studies within indicate that there are areas where expert evidence is currently inadmissible, where the criminal justice system and the search for truth would be better served by their admission. The review of the underpinning law and how such evidence is presented to and addressed by the courts also indicates that there are both procedural and broader legislative changes which would better serve the process of truth seeking.

The three stages where the possibility of elements of reform have been identified by these case studies are:

1. Admissibility and concerns around the function of the CrimPR.
2. How the evidence is presented and heard within the trial process
3. Specific techniques which may serve the process of truth seeking.

#### 8.1 Admissibility and Concerns around the Function of the CrimPR

The first section considers the effective use of expert evidence by the courts, reviewing the Law Commission proposals and the subsequent revision of the CrimPR and consideration of the likely effectiveness of the move to regulation by procedural rules rather than statute. The conclusion is that there were indeed missed opportunities within the review, but also the development of what is likely to be an effective framework to better manage the expert evidence that comes before the courts, this

being done by ensuring that expert testimony that is admitted will have its limits and its reliability clearly mapped for the jury.

With regard to the revised CrimPR it is argued that two clear findings emerge:

1. That within the limits of the available science, the CrimPR and associated practice directions should ensure that expert evidence placed before the courts is set out such that its limits are recognised.

2. The failure to review the *Turner* principle means that there is expert evidence, such as that discussed in relation to eyewitness identification evidence, and arguably the polygraph, which is potentially helpful to the jury, but remains inadmissible.

### **8.1.1 The Turner Principle**

The *Turner* principle was not reviewed as part of the Law Commission consultation and is captured in 19A.1 of the criminal practice directions which states that expert evidence is admissible if:

(ii) it is needed to provide the court with information likely to be outside the court's own knowledge and experience;...

As *Archbold* notes 'the principle set out in *Turner* is clear, but its application continues to cause difficulty.'<sup>845</sup> A *Criminal Law Review* editorial<sup>846</sup> at the time of the Law Commission consultation described the decision not to discuss the necessity criterion as 'somewhat facile', noting the difficulty in determining what the limits of normality are with respect to psychological and psychiatric evidence.

For this principle, the issues could be seen as twofold: One is that of determining what is within the knowledge of the jury; the other is that as the boundaries of science advance, there may be areas of knowledge in respect of which current scientific

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<sup>845</sup> *Archbold Criminal Pleading Evidence and Practice* 2019 Ed 4-395

<sup>846</sup> Editorial (2009) Examining expert evidence *Criminal Law Review*, 6, 387-388

thinking is no longer within the experience of the court, but the risk is that binding precedent may ensure that the situation remains fixed. It should however be noted that some limited flexibility in application has been shown, for example in *R v O'Brien* (as discussed in 6.0)

One example of where the movement of science has led to expert evidence becoming admissible is that of Attention Deficit Hyperactivity Disorder (ADHD), which was almost unheard of outside very limited circles 30 years ago.<sup>847</sup> It was not a formal diagnosis at that time, and is likely to have been viewed as part of normal, but poor behaviour in the event that an individual displaying what we now know to be ADHD came before the courts. ADHD is now a recognised medical condition and can be subject to expert testimony.<sup>848</sup>

Revisiting the consideration given to eyewitness testimony in Chapter 6, both the evolving scientific evidence and the Scottish case law, the difficulty presented by the *Turner* test and determining what is outside the courts' own knowledge and expertise becomes painfully apparent. As noted in the earlier discussion, there is wide disparity between the understanding of experts and non-experts on the function of memory and how this applies to eyewitness identification evidence, the split between the 'common sense memory belief system', and the 'scientific memory belief system'.<sup>849</sup>

The *Turnbull* test and the directions given to the jury both serve to caution the jury as to the limits placed on eyewitness testimony, but concerns with regard to the ability of jurors to comprehend and follow the directions of judges have been repeatedly highlighted within this thesis.

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<sup>847</sup> Searching PubMed using the term 'ADHD Children' the number of papers accessible has increased rapidly since 1970, 1970 – 11, 1980 -84, 1990- 189, 2000 – 507, 2010 – 1141, 2016 - 16496.

<sup>848</sup> e.g. *R v Conroy* [2017] EWCA Crim 81

<sup>849</sup> S Akhtar, LV Justice, L Knott, F Kibowski and MA Conway 'The 'Common Sense' Memory Belief System and its Implications' (2018) 22 *International Journal of Evidence and Proof* 289



In his seminal work, Redmayne, considering *Turner*, notes that ‘...it is possible that the blunt application of the credibility and jury competence limbs of the rule leads to the exclusion of evidence that could help the courts...’<sup>850</sup> and cautions against being too dismissive of what expert evidence has to offer in a number of fields including eyewitness testimony. Psychologists are trained and educated to have a better understanding of human behaviour, thought, and perception than the ordinary lay person and it seems somewhat illogical to be automatically dismissive of such expertise.

This would seem to beg the question of whether consideration should be given to an addition to the jury competence leg of *Turner*. Redmayne expresses doubt that an explicit reformulation of *Turner* would be ‘wise’. Noting this comment from such an academic authority, it is nonetheless respectfully suggested that such a partial reformulation or add-on may ask ‘is there is a substantial body of opinion, which accords with the reliability standard within the CrimPR, and indicates that the common sense understanding of an issue and the expert opinion relating to the same matter are disparate?’

- **A recommendation from this study is that the *Turner* test be reviewed.**

## **8.2 How the Evidence is Presented and Heard within the Trial Process**

It is argued that beyond the notion of specific areas of expert evidence there are organisational or procedural techniques which may assist a court in understanding and better utilising the expert evidence before it.

### **8.2.1 Failure to Adhere to the CrimPR: Could or Should There be any Sanction?**

The previously noted miscarriages of justice where expert testimony was a central component in the miscarriage, either as a consequence of that evidence being unreliable, badly presented, or subject to bias, emphasises the need for expert evidence to be correctly managed both prior to and within the trial process.

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<sup>850</sup> M Redmayne *Expert Evidence and Criminal Justice* (Oxford University Press 2001), 196

The failure to follow the CrimPR by both some experts and the courts themselves was identified within Chapter 4. The sanctions for non-compliance with the rules, are set out in r3.5(6):

- (6) If a party fails to comply with a rule or a direction, the court may-
- (a) fix, postpone, bring forward, extend, cancel, or adjourn a hearing;
  - (b) exercise its powers to make a costs order; and
  - (c) impose such other sanction as may be appropriate.

However, what this does not address is the issue of the court itself failing to adhere to the rules. Although this relates to one of the parties failing to adhere to the rules, the Court of Appeal in *R v LR* stated:

The starting point is simple. Orders made by Crown Court judges must be obeyed. The normal consequence of disobedience by the prosecution to an order made by the judge in the interests of a fair trial is either the exclusion of any evidence to which the order relates, or ... the stay ordered by the judge. The cases are likely to be very few and far between where his order is so inimical to the interests of justice that no judge could reasonably have made it, so that the Crown can properly refuse, courteously, to comply, and then challenge the consequent stay by appeal to this court.<sup>851</sup>

Perrins<sup>852</sup> suggests that such a stay for abuse of process would be highly unlikely unless there was any specific prejudice caused by the non-compliance. Could this mean that if the failure to adhere to the rule by the court resulted in specific prejudice to the defendant it may be grounds for appeal?

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<sup>851</sup> *R v LR* [2010] EWCA Crim 924 [16]

<sup>852</sup> G Perrins 'Criminal Procedure Rules Insight' updated 20/04/16  
<https://login.westlaw.co.uk/maf/wluk/app/document?&srguid=i0ad832f200000167665f3e423bd1ec78&docguid=I634B1620C2C411E29C44964D524E4788&hitguid=I634B1620C2C411E29C44964D524E4788&rank=1&spos=1&epos=1&td=49&crumb-action=append&context=21&resolvein=true> accessed 30/11/18

Would the failure to adhere to the CrimPR be grounds for appeal against conviction? Clearly in the event of an appeal arising, the wider question would be whether the failure was of such significance (alone or in conjunction with other issues) to put the safety of the conviction in doubt. However, the comments made by some members of the judiciary to the Lord Chief Justices review that they did not even know where to find the CrimPR,<sup>853</sup> is not only disturbing, but does raise the question (sadly unanswerable) of how many, if any, of the cases heard by those unidentified judges were appealed.

The Court of Appeal has been clear that procedural irregularities in and of themselves are not grounds to withdraw an issue from the jury. In *R v Ashton*,<sup>854</sup> a case concerning an application for leave to appeal the court stated:

[The] prevailing approach to litigation is to avoid determining cases on technicalities (when they do not result in real prejudice and injustice) but instead to ensure that they are decided fairly on their merits. This approach is reflected in the Criminal Procedure Rules and, in particular, the overriding objective. Accordingly, ..., absent a clear indication that Parliament intended jurisdiction automatically to be removed following procedural failure, the decision of the court should be based on a wide assessment of the interests of justice, with particular focus on whether there was a real possibility that the prosecution or the defendant may suffer prejudice. If that risk is present, the court should then decide whether it is just to permit the proceedings to continue.<sup>855</sup>

Leave to appeal was refused, and this would seem to clearly indicate that any concern regarding failure to adhere to the CrimPR would have to take the route of identifying either new evidence, or evidencing that the failure to follow the CrimPR had resulted

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<sup>853</sup> see 4.3

<sup>854</sup> *R v Ashton (John)* [2006] EWCA Crim 794

<sup>855</sup> *ibid* [8]

in prejudice or injustice. Ormerod<sup>856</sup> observes that this allows a more flexible approach than was formerly the case, with the only limitations placed on the court's ability to address procedural errors being a consideration of the actual intent of the legislature, and the need to identify where there is a real risk of prejudice.

However, it is arguable that limits have been set on the applicability of *Ashton*. Hungerford-Welch<sup>857</sup> commenting on the case, noted that the starting point for the court would be Parliament's intentions, as in the case *R (on the application of Rahmdezfouli) v Woodgreen Crown Court*<sup>858</sup> where the issue was one of statutory interpretation. In that case, the procedural irregularity concerned the alleged failure to explain the accused's options appropriately. Section 17A(4) of the Magistrates Court Act 1980, stipulates that the court 'shall then explain to the accused in ordinary language...' thus the phrasing and the intention is mandatory.

In terms of the effect this may have on the ability to appeal in the event of non-compliance with the CrimPR, it is argued the situation is as per *Ashton*, in that the CrimPR are not an Act of Parliament, and as such there is no intention of the legislature to consider.

Arguably, if substantial prejudice had been introduced either by the admission of expert evidence which should not have been ruled admissible, because of a failure to adhere to the CrimPR, then this may be rectified on appeal. However, this is a slow and costly process to both the state and the individual, therefore the call by the LCJ to adhere to the CrimPR seems the more timely and logical route.

It seems to be unclear if there is any route beyond pressure from the LCJ, and one assumes a desire by the judiciary not to have their judgments successfully appealed, coupled with ongoing education of the judiciary and Bar to drive this compliance.

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<sup>856</sup> DC Ormerod 'Procedure: Procedural failures – jurisdiction' (2006) 11 *Criminal Law Review* 1004

<sup>857</sup> P Hungerford-Welch 'R(on the application of *Rahmdezfouli*) v *Woodgreen Crown Court*: Taking guilty plea (Case Comment)' (2014) 2 *Criminal Law Review* 158

<sup>858</sup> *R (on the application of [2013] EWHC 2998 (Admin)*

Running throughout this concern as to adherence to the CrimPR is the need for culture change as discussed in 4.3. Have the modified CrimPR been incorporated in to the everyday thinking and practice of the courts? It would seem one way to ascertain this would be to undertake a follow-up study to Sir Brian Levesons 2015 Review of Efficiency in Criminal Proceedings.

- **A recommendation from this study is that compliance with the CrimPR part 19 and its associated practice directions is more strictly enforced**
- **A recommendation is that there is a need for a follow-up study of the Lord Chief Justices 2015 review of the first 10 years of the CrimPR to ascertain if compliance has improved with the revisions to the CrimPR**

### **8.2.2 Judge Alone Trials**

In Chapter 5, the idea of judge-only trials was considered. While the conclusion within that section was that the current thinking from within this legislature would preclude the use of such an approach, the question which perhaps needs to be asked is, does the refusal to consider the option already followed, apparently successfully, in some common law jurisdictions have more to do with ideology than rationality? Australia has legislated for and utilises judge-only criminal trials. There seems little evidence that the change has adversely impacted the administration of justice in that jurisdiction.

It is clearly difficult on the basis of such a limited project to make recommendations for wholesale change on something as fundamental as a change to the system of jury trial, and based on the previously discussed debate which surrounded s43 of the CJA 2003, it is seems clear that such a change is a distant prospect, arguably so distant as to have no chance of ever occurring politically.

However, it is respectfully noted that the Law Commission has never reviewed the evidence for judge alone trials and, as such, it may be that such a review is now

overdue, as such a review would take account of both the legal and wider social and financial implications of such a change.

- **This study recommends a Law Commission review into Judge only trials in cases where complex expert evidence is the primary or only evidence.**

### **8.2.3 Concurrent Evidence**

The evidence for the effectiveness or otherwise of concurrent evidence in criminal trials, could most generously be described as lacking. The author has been unable to locate any academic analysis of such an approach. However, there is solid evidence from both this jurisdiction, and from others, notably Australia, in relation to the use of concurrent evidence in the civil setting, and as noted in chapter 5 that evaluation is generally positive.

While it has not been possible to locate any specific evaluations relating to concurrent evidence in criminal trials, part of the Freckleton study sought views from study participants regarding utilising this approach in criminal trials. The views were mixed, with Freckleton et al. noting that whether they had utilised this approach or not, judges and prosecutors were more enthusiastic or interested in the approach than defence lawyers. One of the concerns raised by a number of defence lawyers was that this approach could disadvantage their clients because, while experts for the prosecution tend to be more mainstream, those for the defence can be more 'fringe', and as such may not hold up well in comparison to the more mainstream expert.<sup>859</sup>

However, it was also noted that some defence barristers were both open to the idea and enthusiastic having seen it in action in other domains. For example one defence barrister, commenting on its use in a coronial inquest stated:

[It] gave experts an opportunity to express their view. I actually thought it was a better way of assessing the reliability, honesty, and credibility of the

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<sup>859</sup>Freckleton I, Goodman J, Horan J and McKimmie B, *Expert Evidence and Criminal Jury Trials* (Oxford University Press New York, 2016), 3.56

expert because they were immediately confronted by their colleagues, who were able to comment specifically on an answer that one of them had given, and I felt there was a greater capacity to expose an answer as being unreliable in that forum. So I thought the experts bouncing off each other ... really exposed some of the flaws of one of the experts' evidence.<sup>860</sup>

Some of the reservations highlighted by the study included factors such as the less confident expert being overwhelmed by the more confident or more garrulous expert. However, it could be argued that this is little different to the experience of the jury determining if an expert is confident, and if he appears credible when the experts appear separately, noting that any such expert already faces cross examination by counsel.

As noted previously, there was no specific rule permitting concurrent evidence in the civil courts prior to the pilot being undertaken, but the pilot was nonetheless undertaken. There is also nothing within the CrimPR either explicitly excluding or permitting concurrent evidence. Given the positive responses to such evidence in Australia, and the potential to better enable the jury to build their story, it would seem inappropriate to say 'never' without first reviewing the possibility of piloting such an approach if a suitable case were identified where the courts believed it would be in the interest of justice to do so.

- **This study recommends that such an approach is considered in any future Law Commission review concerning the presentation of expert evidence in court**

### **8.3 Specific Techniques which may Serve the Process of Truth Seeking.**

#### **8.3.1 Eye and Earwitness Identification**

Eyewitness identification evidence is one of the forms of evidence most frequently implicated in miscarriages of justice. Research indicates that in a number of areas

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<sup>860</sup> Ibid 3.59

there is a marked discrepancy between what lay people and psychologists working in the field believe to be true in respect of how people remember and present what they have seen. In some areas, this discrepancy is so marked that it is argued expert testimony either in the form of a modified *Turnbull* direction or presence in court would better serve the function of attributing the relevant weight to this evidence.

With regard to earwitness testimony, the same argument applies in the case of lay identification. In the case of expert testimony by auditory analysis, it seems that the lack of reliability in terms of its compliance with the indicators set out in the practice directions<sup>861</sup> support the notion that this jurisdiction should take the lead of *O'Doherty*<sup>862</sup> and mandate the use of acoustic techniques as a supplementary technique.

- **This study recommends that the Law Commission review the use of expert evidence in respect of identification evidence**

### 8.3.2 The Polygraph

Despite the assertion made in *Fennell* that evidence produced by polygraph is inadmissible, it is argued that the analysis in Chapter 7 clearly demonstrates that there is a sound argument in both logic and law that this need not be the case.

The Privy Council in *Bernal* appeared to leave open the possibility that in exceptional cases polygraph evidence may be admissible. It is respectfully suggested that such a case may be one as per the Canadian case of *Béland*, where in her dissent Wilson J argued that such evidence should be admissible where the evidence in the case was essentially one person's word against another. As with *Béland*, the question that the court would have to address would be whether the prejudicial effect of such evidence outweighed the probative value.

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<sup>861</sup> Criminal Practice Directions October 2015, most recent amended April 2019 at 19A.5 and 19A.6

<sup>862</sup> *R v O'Doherty* [2003] 1 Cr App R 5CA (Crim Div) (NI)



It is further argued that the polygraph has the requisite degree of reliability to meet the criteria set out in r19 of the CrimPR.

- **This study recommends that the Law Commission undertake a review of the evidence relating to the polygraph to explore the possibility of its introduction in the criminal justice system via possible legislative change**

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