**Forensic Identification and Miscarriages of Justice in England and Wales**

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**Introduction**

Any fair and effective criminal justice system must ensure that evidence of guilt will be decisively more convincing than the defendant’s claim to innocence. This burden on the prosecution, to satisfy the judge or jury of proof beyond a reasonable doubt, promotes an acceptance in law (if not in the popular press) that “It is better that ten guilty persons escape than that one innocent suffer” (Blackstone, 1769: Vol. iv p.27). Despite such fundamental tenets, and despite even the sophistication of contemporary forensic science, the criminal process does still convict the innocent.

While forensic science is acclaimed in the media, it has a blemished history in reality. Many infamous miscarriages of justice suffered from scientific evidence that was flawed, misrepresented, or suppressed (Walker and Starmer, 1999). “Scientific” methods of identifying criminal perpetrators have certainly advanced dramatically but are not infallible.

In this chapter, we shall outline the meanings and prime causes of “miscarriage of justice,” providing examples of cases where forensic identification methods have been at the heart of miscarriages of justice. We then examine the mechanisms in England and Wales for remedying miscarriages of justice and assess their success.

**Faulty Criminal Process in England and Wales**

**Miscarriages of Justice**

A “miscarriage” means literally a failure to reach an intended destination or goal. A miscarriage of justice is therefore a failure to attain the desired end result of “justice.” Justice is about distributions—according persons their fair shares and treatment. The primacy of individual autonomy and rights is central to the “due process model” of criminal justice (Packer, 1969), which recognizes that the possibility of human fallibility and error can thereby yield grave injustice, as when the system convicts the innocent or even convicts without respecting procedural rights. Thus, a possible definition of “miscarriage” is that it occurs whenever suspects or defendants or convicts are treated by the state in breach of their rights, whether because of the following: first, the deficient processes; second, the laws that are applied to them; third, because there is no factual justification for the applied treatment or punishment; fourth, whenever suspects or defendants or convicts are treated adversely by the state to a disproportionate extent in comparison with the need to protect the rights of others; fifth, whenever the rights of others are not effectively or proportionately protected or vindicated by State action against wrongdoers; or sixth, by state law itself.

The third category of miscarriage—where there is no factual justification for the treatment or punishment—can result in a conviction even when the defendant in reality has committed the offense. This broader definition has caused some debate over the proper focus of researchers, with some claiming that an exclusive focus on the “innocent” is vital. They prefer the term “wrongful conviction” (although this too can have wider meaning, to include the factually and legally innocent as well as those convicted through unjust procedures [Risinger, 2007]), to distinguish those convicted but innocent, from those unjustly convicted. The House of Lords (now called the Supreme Court) considered such nomenclature in the case of R v. Secretary of State for the Home Department, ex parte Mullen:

‘Miscarriage of justice’ is an expression, which, although very familiar, is not a legal term of art and has no settled meaning. Like ‘wrongful conviction’ it can be used to describe the conviction of the demonstrably innocent… But, again, like ‘wrongful conviction’, it can be and has been used to describe cases in which defendants, guilty or not, certainly should not have been convicted. (R v. Secretary of State for the Home Department ex parte Mullen [2004] UKHL 18: paragraph 9)

The debate over taxonomy continues (Naughton, 2010), but we use the term “miscarriage of justice” throughout the chapter to refer to those unjustly convicted rather than seeking to assert “innocence,” a status that is not officially bestowed, even if it is knowable.

The most important catalogue of contemporary miscarriages in England and Wales concerned Irish “terrorist” cases of the 1970s. Most of these and other miscarriages arise from a multiplicity of causes. For instance, the Criminal Cases Review Commission (CCRC) (2000) specified the following causes in the 80 cases it had by then referred to the Court of Appeal (some with multiple causes per case): police/prosecution failings = 27; scientific evidence = 26; nondisclosure = 23; new evidence = 23; defective summing up = 11; defective legal arguments = 10; false confessions = 6; and defense lawyer failings = 6.

The most grievous danger is the falsification of evidence. For example, informers who are co-accused may have self-serving reasons for exaggerating the role of the defendant. The police are also in a powerful position to manipulate evidence, for example, by pressuring an accused or falsely recording statements. Both the police and lay witnesses may be unreliable when attempting to identify a suspect, especially if the sighting was momentary and in a situation of stress (R v. Turnbull [1977] QB 224 (CA)). The evidential value of expert testimony has also been overestimated because the tests being used were inherently unreliable, because the scientists con- ducting them were incompetent, or both. A further issue may be the non-disclosure to the defense of relevant evidence by the police, prosecution, or their experts.

The conduct of the trial may also produce miscarriages. For example, judges are sometimes prone to favor the prosecution evidence rather than acting as impartial umpires. Equally, defense lawyers may not always be as competent or assertive as they should be. There can also be problems concerning the presentation of defendants in a prejudicial manner. An insidious way of achieving this effect is the pejorative labeling of them by the media as “terrorists” or “bad mothers.” Similarly, heavy-handed security arrangements accompanying trips to court and a defendant’s quarantined appearance in the dock inevitably convey an impression of guilt and menace.

**Forensic Identification and Criminal Investigations**

The identification of perpetrators is central to any criminal investigation, though most crimes are easily resolved since the perpetrators are identified red-handed at the scene or swiftly traced, usually by the agency of the public rather than of the police or forensic experts. Where public assistance is not enough, forensic identification techniques, such as fingerprints and DNA profiles, can discern the true perpetrators, even years after the crime. However, the perception (perhaps propagated by television series such as “CSI”) that reliance upon expert witnesses and forensic evidence predominates in investigations and trials is misguided. While it has grown over 30 years, it probably still features in a minority of criminal cases (U.K. Government, 2005). Furthermore, the increased availability and affordability of a plethora of forensic techniques incurs the risk of undue trust in this type of evidence. A few examples of flawed forensic identifications will serve to illustrate these misgivings.

**Fingerprints and the Case of Shirley McKie**

For over a century, investigators have been collating the fingerprints of suspects and criminals. Indeed, fingerprints, with their notion of “uniqueness,” have become perhaps the most trusted identification method and continue to be used daily in identifications across the world, with the support of large databases and, latterly, Automatic Fingerprint Identification System (AFIS) technology. However, problematic identifications and questions over the expertise and techniques of fingerprint examiners have arisen.

In 1997, Marion Ross was murdered in her home in Kilmarnock, Scotland. The investigation led to David Asbury, who became suspect when a fingerprint found on biscuit tin containing money at his home was identified as belonging to the victim (Scottish Parliament, 2011). Shirley McKie, a uniformed police officer, was called to guard the crime scene while investigators worked inside. They claimed to find McKie’s fingerprint inside the Ross house, but McKie denied ever having ventured inside the house, calling into question the accuracy of the fingerprint “match.” During testimony at the trial of David Asbury, she confirmed that she had not been into the house, leading to a charge of perjury for lying about her movements. She was acquitted in 1999 after the court heard the testimony of two American fingerprint experts that the Scottish Criminal Records Office (SCRO) had wrongly found a match. David Asbury was freed in 2002 after the conclusion was reached that other crucial fingerprints were also erroneous. Eventually, the Scottish government set up a comprehensive inquiry under Sir Anthony Campbell (a retired senior judge). His Fingerprint Inquiry Report (Scottish Parliament, 2011) reaches many conclusions concerning not only errors in McKie’s case but also about fingerprint comparison as a “science.” It concluded that:

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… 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. (Scottish Parliament, 2011: pp. 739)

The report then recommends that “Fingerprint evidence should be recognised as opinion evidence, not fact…” and that “Examiners should discontinue reporting conclusions on identification or exclusion with a claim to 100% certainty or on any other basis suggesting that fingerprint evidence is infallible” (Scottish Parliament, 2011: pp. 740).

Fingerprints are facing a challenging time. Their “scientific” basis has now been called into question, and there are growing numbers of inquiries and cases in England too (such as R v. Smith [2011] EWCA CRIM. 1296) where fingerprint evidence has been challenged, something unheard of in previous decades. Issues around the “science” of fingerprinting, and the “expertise” of examiners, now require concerted effort on the behalf of the fingerprint expert community, if fingerprints are to retain their validity as a reliable identification technique.

**“Old” v. “New” Forensic Technology: The Case of Stefan Kiszko**

Stefan Kiszko was convicted of the murder of 11-year-old Lesley Molseed in 1975 (R v. Kiszko [1979] 68 CR.APP. R 62). Lesley’s killer had ejaculated on her underclothes. In the 1970s, a semen sample taken from Kiszko during the investigation did not contain sperm because he suffered from hypogonadism.[[1]](#footnote-1) The killer’s ejaculate did contain sperm. These results were kept from the defense. It was not until 1992, after 16 years in prison, that the Court of Appeal was to hear the convincing scientific evidence that Stefan Kiszko could not have been Lesley’s killer. The killer of Lesley Molseed had apparently evaded justice, until evidence from her murder featured in a “cold case” review. This time, DNA techniques were able to obtain a profile from the semen sample. Ronald Castree had earlier been arrested in 2005 in connection with another sex attack but was not then charged. However, his DNA had been taken and placed on the National DNA Database (NDNAD). The profile from the NDNAD then matched the new profile obtained from Lesley Molseed’s underclothes. It took over 30 years to convict the true killer of Lesley Molseed, using DNA techniques unavailable when Kiszko was convicted, but Ronald Castree was found guilty (R v. Castree [2008] EWCA Crim. 1866). Kiszko had died shortly after his release and never saw the real perpetrator of the crime imprisoned.

**“Ear Prints” and the Case of Mark Dallagher**

In 1998, Mark Dallagher was found guilty of the murder of 94-year-old Dorothy Woods. He was identified by a new “ear-printing” technique developed in the Netherlands. The technique was primarily used to identify burglars who habitually “listen” at walls or windows to detect occupiers before entering an abode. While listening, burglars would press their ears against a surface, and based upon the same principles of fingerprinting, an “ear print” would be left. This “print” could then be compared to that of a suspect using computer technology. Two experts, Van Der Lugt, a Dutch police officer, and Regius Professor of Forensic Medicine and Science Peter Vanezis of Glasgow University, testified in court that they had “matched” Dallagher’s ear prints to those on Dorothy Wood’s window. Dallagher continued to maintain his innocence throughout his six-year imprisonment, before DNA testing on exhibits at the crime scene pointed to a different perpetrator. At his appeal, the Crown claimed to have “anxieties” about the case and offered no contest, leaving Dallagher to walk free (R v. Dallagher [2002] EWCA CRIM. 1903).

The Dallagher case highlights the dangers of reliance upon new identification techniques. Expertise in the courtroom can be highly persuasive, but its scientific base should be rigorously tested before being applied in criminal cases. In this instance, DNA testing demonstrated the fallacy of the ear-print “science,” whereas neither the scientific community nor the courts had been effective at testing the “science.”

**DNA “Gold Standard”?**

The advent of forensic DNA testing has been revolutionary, leading to the accurate detection and conviction of many criminals and the exoneration of hundreds of wrongly convicted. However, while DNA is lauded as the “gold standard” of forensic identification technology, there is sometimes confusion as to the extent of its proof, including a need to distinguish identity match from matters such as when or why a person came to be identified.

A recent illustration of the disputes concerns the investigation into the murder of two British soldiers at Massereene Barracks, Northern Ireland, in 2009 (R v. Duffy and Shivers [2011] NICC 37). Much of the evidence was based on identifications at the scene, testimony of the defendants, and materials found in the burned-out getaway car. DNA tests had linked one defendant, Duffy, to the tip of a latex glove and seat-belt buckle in the abandoned car. The DNA of Shivers was linked to matches and a mobile phone. The judge, sitting without a jury, decided that while he was satisfied that the DNA link to the car was soundly established, the prosecution had failed to demonstrate that the DNA alone linked Duffy to the murder plot, whereas stronger evidence was adduced against Shivers, including lies about his whereabouts. A further crucial issue in the case was also whether the novel statistical process used could be regarded as having achieved sufficient recognition as valid and reliable.

This controversy had earlier received publicity in another Northern Ireland case, in the prosecution of Sean Hoe for the Omagh bombing (R v. Hoey [2007] NICC 49). In that case, the judge ruled that the “novel” technique of testing ever-smaller samples for DNA known as “low template number DNA” (LTDNA) had not yet reached the level of “general acceptance” within the scientific community. For that, among other reasons, the judge ordered an acquittal. In 2010, LTDNA was further considered in R v. Reed and Reed (R v. Reed and Reed [2010] 1 CR. APP. R. 23) and this time admitted as evidence by the English Court of Appeal.

**Features of Flawed Forensic Science Cases**

There are common features to many of the cases involving flawed forensic evidence.

**Contamination and Errors**

The collection of materials, which will eventually be tested in forensic laboratories, is primarily at the discretion of the police. Thus, the obvious dangers arise that nonscientists will accidentally contaminate evidence or that they will fail to appreciate the value of available evidence and will fail to forward it to the laboratory (perhaps because of budgetary constraints). The deployment of professional Scenes of Crime Officers (SOCOs) or Scenes of Crime Examiners (SCEs) by no means solves all the problems, since they attend only a minority of crimes scenes, often only after other police officers have visited. The Disclosure Manual (CPS, 2005), issued under the Criminal Procedure and Investigations Act 1996, requires police investigators to “ensure that all reasonable steps are taken for the purposes of the investigation and, in particular, that all reasonable lines of enquiry are pursued” (CPS, 2005: paragraph 3.5). However, there are no specified means of enforcement, and defense teams are not given resources to check for themselves. As well as the contamination of exhibits and samples at the scene of the crime, the samples placed in the hands of police and scientists are also at risk if not handled properly. For example, in Germany, police forces expended thousands of hours in chasing the “Phantom of Heilbronn” (CPS, 2005: paragraph 3.5). The basis of this was the DNA profile of an unknown woman that was turning up at crime scenes for several years. The “Phantom” was considered a criminal mastermind, evading capture despite large rewards for her identification. However, investigators finally realized that contamination was the more likely answer, and cotton swabs used in the DNA process were eventually shown to be the cause.

Recent high-profile errors have also arisen in the United Kingdom in 2012. A young man in Exeter, Adam Scott, was charged with a rape in Manchester, on the basis of a DNA “match.” He denied ever having travelled to Manchester, and his lawyer pressed for further testing of the results. It transpired that the DNA from the rape case had been contaminated with the laboratories of LGC Forensics by a sample taken from Scott when arrested for a minor affray offense (BBC, 2009).

During the lengthy and perplexing police investigation into the death of MI6 employee, Gareth Williams, LGC Forensics provided police with a DNA profile from the scene. The police spent a year attempting to trace the individual responsible for leaving the DNA, to no avail. It was later discovered that an LGC employee, manually entering the DNA profile into a computer, had transposed the numbers “3” and “5,” rendering the DNA profile incorrect. This typographical error led to a costly pursuit of a nonexistent individual (Dodd and Malik, 2012).

**Quality and Competency**

Concerns arise about all the professions that come into contact with potential evidence and an investigation, but the particular focus here is about the quality and competency of forensic science personnel. The attempt to foster quality and efficiency in forensic science by market competition has yet to prove that it is immune to the other “problems” of markets including the creation of “bargain basement” forensic science. An ambitious forensic regulation scheme rose and fell with the demise (in 2009) of the Council for the Registration of Forensic Practitioners, which had registered “competent” forensic experts and was praised by the courts (Schlesinger and Hamilton, 2012). The Home Office’s Forensic Science Regulator has authority to accredit for government contracting purposes but only scrutinizes laboratories and companies, the assumption being that their employees will be monitored and checked as part of their quality assurance measures.

**Translation into Proof**

The competency of lawyers to spot and explore problematic scientific issues is by no means unblemished, and their deficiencies will in turn hamper the comprehension levels of juries (General Medical Council v. Meadow [2006] EWCA Civ 1390: paragraph 226).

In many international jurisdictions, judges have been given the role of “gatekeeper” to ensure that “junk science” remains inadmissible at trial. However, they have also been criticized (Cassella and McCartney, 2011; Garrett and Neufeld, 2009). It has been concluded that “Scientific illiteracy on the part of the legal profession, when coupled with the flaws in forensic science, forms a ‘toxic combination’” (Cassella and McCartney, 2011: pp. 82). Proposals to alleviate the situation in a lengthy and complex Law Commission Report (Edmond, 2011) await implementation.

**Funding for Forensic Work**

Budgetary constraints are restricting the extent to which police employ forensic scientists. In this way, an ability to pay impacts strongly on the ways on which criminal justice is delivered. A further consequence is a trend toward in-house police scientists or less qualified or less experienced independent forensic scientists. Disquiet arises about the quality and independence of small or isolated scientific units. Access by the defense to properly qualified, experienced, forensic scientists is even more hampered by inadequate funding. In the worst cases, legal aid authorities may withhold funds altogether on the grounds that, for example, the scientific evidence is, in their (lay) view, unassailable. Even when funds are forthcoming, the defense may be required to instruct a “local expert” who is not viewed as suitable.

**Biases**

During the appeal of Judith Ward (2011), who was exonerated from involvement in an IRA coach bombing, Lord Justice Glidewell explained (R v. Ward [1992] 96 CR.APP. R. 1):

For lawyers and judges a forensic scientist conjures up the image of a man in a white coat working in a laboratory, approaching his task with cold neutrality, dedicated only to the pursuit of scientific truth. It is a sombre thought that the reality is sometimes different… Forensic scientists employed by the government may come to see their function as helping the police. They may lose their objectivity.

Recent scholarly examination of the processes involved in forensic evidence “generation” has focused on the possible biases of scientists, in particular the impact of cognitive bias. The National Research Council of the National Academy of Science’s Report on forensic science in the United States (ibid.:pp.51) condemned the infiltration of prosecution biases into the work of laboratories that operated within and overseen by police agencies. In England and Wales, such concerns led to the absorption into the independent Forensic Science Service (FSS) of police laboratories such as, in 1996, the Metropolitan Police Laboratory. Yet, the FSS closed on cost grounds in 2012 (2009), and forensic science in England and Wales is now provided by private companies and in-house police facilities.

**Developments/Improvements in Science**

Several forensic techniques relied upon in the past have been shown through later scientific developments to be flawed or imprecise. One example is serology, while polygraphs are also considered unacceptable in English trials (U.K. Government, 2011). Arson investigation has had to be radically over- hauled in the United States since common assumptions were based on experience that, when tested under experimental conditions, were proven wrong (R v. Chapman [2006] EWCA CRIM. 2545).

**Mechanisms to Redress Residual Error**

Many of the safeguards against wrongful convictions must reside within fair and rational legal rules and the professional working cultures fostered by appropriate training and management and assured by accreditation, quality assurance, and validation processes, within the police, prosecution, forensic science, judiciary, and advocates. Nevertheless, whatever care is expended, mistakes are inevitable, and so effective processes for remedying error remain essential even after conviction.

The Court of Appeal, originally established in 1907 after several high-profile wrongful convictions, can overturn convictions if it considers the conviction to be “unsafe” under section 2(1) of the Criminal Appeal Act 1995 (National Fire Protection Association, 1992). There may be two interpretations of unsafe: that a factually innocent person has been wrongly convicted or a factually guilty person has been convicted but there has been a serious procedural or legal error or illegality (U.K. Government, 1995). The Court’s own approach is summed up in R v. Hickey (Roberts, 2003):

This court is not concerned with the guilt or innocence of the appellants; but only with the safety of their convictions… the integrity of the criminal process is the most important consideration for courts which have to hear appeals against conviction. Both the innocent and the guilty are entitled to fair trials.

Difficulties have especially stemmed when appeals arise on factual error grounds, necessarily forcing the Court of Appeal to trespass on the role of the jury but confined to a “review” and not rehearing the case. The Court of Appeal only hears fresh evidence when “necessary or expedient in the interests of justice” under section 23(1) of the Criminal Appeal Act 1968 (Rv. Hickey [1997]. Unreported) and must have regard under section 23(2) to the following: (1) whether the evidence appears to be “capable of belief,” (2) whether the evidence may afford any ground for allowing the appeal, (3) whether the evidence would have been admissible at trial, and whether there is a reasonable explanation for the failure to adduce the evidence at trial.

Three main complaints are leveled at the Court: that too much deference is shown to the jury verdict, that there is undue reverence to the principle of finality, and that the court is motivated by the fear of “opening the floodgates” to a deluge of appellants beyond its resources (U.K. Government, 1968).

Major high-profile miscarriages of justice in England and Wales have been seminal in prompting changes to the appellate system. The ultimate, successful appeal of the Birmingham Six (Spencer, 2006; U.K. Government, 1993) wrongly convicted of mass murders in IRA pub bombings was swiftly followed by the announcement of a Royal Commission into Criminal Justice. Its subsequent report (R v. McIlkenny and others [1992] 2 ALL E.R. 417) called for the establishment of a new independent body to investigate alleged miscarriages of justice, replacing the politically tainted and underresourced process of petitioning the Home Office. The idea was implemented in the shape of the CCRC by Part II of the Criminal Appeal Act 1995 (U.K. Government, 1993).

The role of the CCRC resembles its Home Office forerunner in that it cannot determine the outcome of cases but, if certain criteria are established, it can refer a case back to the Court of Appeal. However, there are critical differences between the old and new systems:

1. Preparation of the application: The establishment of the CCRC has removed some initial practical obstacles from the petitioner. Though the CCRC is not proactive, the application process is user friendly, though the availability of legal advice remains a distinct advantage (Smith, 1995; U.K. Government, 1995).
2. Structures: In addition to the 11 commissioners, the CCRC employs dozens of caseworkers. Its annual budget of around £6 million represents a substantial increase in resources compared to the Home Office. However, the CCRC has faced financial and staffing cutbacks, beginning in 2004 with a reduction of 30 percent in case working staff since then (Hodgson and Horne, 2009).
3. Consideration of the application: The reluctance of the Home Office to refer cases because of “political embarrassment” could only be overcome by a body independent of the executive. The independence of the CCRC is provided for in section 8(2), whereby it “shall not be regarded as the servant or agent of the Crown.…” At least one-third of the CCRC’s membership must be legally qualified, and under section 8(6) at least two-thirds “shall be persons who appear to the Prime Minister to have knowledge or experience of any aspect of the criminal justice system.…” However, the selection of commissioners over the years could be criticized as deriving too heavily from prosecution interests and also reflecting too much the white, male, middle class background so redolent of British judicial institutions.
4. Reinvestigations: It is vital to the success of the CCRC that it is seen to have thorough and transparent investigative processes. However, the government has stood fast against resourcing CCRC in-house investigative staff. Instead, investigations are mainly carried out by the police under CCRC supervision, a relationship that demands a more “trusting attitude to the police” than perhaps is warranted (Criminal Cases Review Commission, 2009: paragraph 7).
5. Disclosure of evidence: The CCRC has a wide power to obtain documents from public bodies under section 17 of the 1995 Act, but these powers do not extend to private bodies (which may include forensic laboratories). As regards disclosure of information to the applicant, the Court in R v. Secretary of State for the Home Department (Malet, 1995) insisted that when the Home Secretary was minded to reject an applicant’s petition on the basis of evidence gathered in any further inquiries, the applicant should be given an opportunity to make representations upon such material before a final decision is made. However, there is no general duty to disclose all the information gathered during any investigation or reinvestigation (Rv. Secretary of State for the Home Department ex parte Hickey (no. 2) [1995] 1ALL ER 490).
6. Referral to the Court of Appeal: To trigger a referral to the Court of Appeal, the CCRC under section 13(1) must “consider that there is a real possibility that the conviction… would not be upheld were a reference to be made.…” This “real possibility” can be realized through “an argument, or evidence, not raised in the proceedings.…” Yet, the Act left much to be determined through the interpretations of the CCRC and also the receptivity of the Court of Appeal, which has to be second-guessed by the CCRC. More radical solutions would have been to give the commission the power to determine applications or at least to make recommendations to the Court of Appeal either to acquit or to order a retrial, placing the onus on the judges to find rea- sons to disagree. However, such ideas would arguably have interfered too much with judicial independence and the finality of verdicts.

**Performance of the CCRC**

In terms of design, the CCRC is an important and innovative reform, which recognizes the possibility of residual errors and works to facilitate their correction. The CCRC has been widely accepted, in theory and in practice, to be a great improvement in terms of independence, resources, expertise, and performance on the predecessor C3 Department of the Home Office and the equivalent unit in the Northern Ireland Office (including four times the rate of referrals). However, increasing criticisms are levelled at the decision- making processes, the resources, and ultimately the remit.

The CCRC began work on April 1, 1997, with 279 cases transferred to it from the Home Office and 12 from the Northern Ireland Office. By March 31, 2012, the commission had received 14,506 applications, of which 13,969 have been completed. Of these applications, 498 referrals have been made to the Court of Appeal, of which 460 have been heard, resulting in 321 quashed convictions or sentence variations.

Evidenced by the foregoing low rate of referrals, the CCRC adopts an inherently cautious approach, reflected by its internal decision-making protocols. While just a single commissioner can refuse referral, it requires three to refer (Nunn V. Chief Constable of the Suffolk Constabulary [2012] EWHC 1186 (Admin)). In practice, Case Review Managers (CRMs), who have the main responsibility for investigating cases, have internalized this “one CM to refuse, three CMs to refer” system with the result that they have transformed the working practice of the “real possibility test” into “a real possibility of a real possibility test” when deciding whether or not to recommend a referral. In this way, the single CRM must decide whether there is a “real possibility” that three commission members will refer before making their own recommendation (Criminal Cases Review Commission, 2004).

It could be contended that in looking for a “real possibility” that a conviction would be reversed by the Court of Appeal, the CCRC is second-guessing the Court of Appeal and only refers those cases that are sure to be overturned—the high success rate in the Court of Appeal combined with the low rate of referrals is indicative of this tendency. However, a greater propensity to refer might reduce the engagement in investigative work, thereby weakening the chances in court. The Court of Appeal can in turn direct the CCRC to carry out investigations under the Criminal Appeal Act 1995 (Elks, 2008), sections 5 and 15, but rarely exercises the power. If the quality of preliminary investigation is reduced, the CCRC will quickly become discredited. In the view of the CCRC itself (U.K. Government, 1995), it might “perpetuate the very miscarriages of justice that the Commission was set up to review.…” There is also the danger of hampering the ability of the Court of Appeal to scrutinize effectively if a sizeable proportion of weak referrals fails.

Moving from its handling of individual cases, a wider performance defect of the CCRC is that it has concentrated too much on individual cases and has failed to undertake a broader analysis and audit of systemic failures and necessary reforms. This aspect of inquiry would be “value-added” work that the CCRC is well placed to carry out or facilitate (Criminal Cases Review Commission, 2001: pp. 26) but that is currently neglected by the criminal justice system.

**Performance of the Court of Appeal**

Crucial to the success of the scheme must be the receptivity to CCRC referrals on the part of the Court of Appeal. The Court has generally shown respect for the CCRC, but one key problem remains the meaning of the statutory test for referral.

As stated, the 1995 Act provides that there must be a “real possibility” that the original conviction, finding, or sentence would not be upheld as “safe” were the conviction to be referred back to the Court of Appeal. In the case of a conviction, the “real possibility” must be as a result of an argument or evidence not raised in the original proceedings or of “exceptional circumstances” such as wholly inadequate defense representation. The leading case on the interpretation of section 13 has been R v. Criminal Cases Review Commission (Elks, 2008: pp. 348). It was held that the meaning of “real possibility” “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 likelihood or a racing certainty.” Those standards were applied both to the admission of fresh evidence (if relevant) and also to the assessment of the evidence by the court. Whether this provides a sufficiently clear signal of society’s determination to avoid miscarriages is questionable. It still leaves much discretion—some defendants might be lucky to be heard by receptive judges, others might not.

**Conclusions**

Miscarriages of justice involving forensic evidence have provided plentiful opportunity for the legal and scientific communities to reflect upon failings of both science and law. While a recent U.S. National Research Council of the National Academy of Sciences Report (R v. Criminal Cases Review Commission ex parte Pearson [2000] 1Cr.App.R141: pp. 149) was scathing about the lack of “science” underlying some prominent forensic techniques, the report also contained “the somewhat hushed admonition that lawyers and judges often have insufficient training and background in scientific methodology and they often fail to fully comprehend the approaches employed by different forensic science disciplines and the reliability of the forensic science evidence that is offered at trial” (National Research Council, 2009). Not only must the forensic disciplines attend to the scientific bases for their processes and conclusions, but equally legal professions and agencies must more soundly incorporate forensic evidence within investigation and trial processes. Decision-making by all scientists and legal professional alike must also be informed by the apprehension that forensic science has never been, and will never be, infallible.

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1. in men, failure of the testes to produce sperm, androgen, or in some cases both [↑](#footnote-ref-1)