On the face of it: CCTV images, recognition evidence and criminal prosecutions in New South Wales

by

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CERTIFICATE OF ORIGINAL AUTHORSHIP

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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ABSTRACT

Since 2002, the use of closed-circuit television (CCTV) has increased significantly in all states and territories in Australia. CCTV surveillance systems (both public and private) now regularly record images of offenders before, during or after the commission of an offence. Increasingly, these images are disseminated among law enforcement officers and members of the public, at which point in time offenders may be recognised by friends, family members or acquaintances. On the face of it, this type of evidence is of great utility. As the act of recognition can occur at any time after the offence has been committed, evidence of identification can be acquired in cases where eyewitness evidence is weak or lacking altogether, or where eyewitnesses or victims are reluctant or unable to testify in criminal proceedings. However, the use of this type of evidence in criminal prosecutions has not been the subject of any detailed scholarly analysis, and it is unclear to what extent it is effective facilitating the administration of justice.

This thesis examines the admissibility and use of recognition evidence based on CCTV images in criminal prosecutions in New South Wales. It draws on a detailed analysis of case law and insights gained during observation fieldwork to analyse whether the provisions of the *Evidence Act 1995* (NSW) are appropriate and adapted to this type of evidence. It concludes that there is judicial confusion about the application of the relevance and opinion provisions of the Act to this type of evidence, and that the unsettled and inconsistent nature of the jurisprudence in this area reduces the accessibility of the law, increases the costs of litigation, and undermines the purposes of the Act. Further, there are inadequate safeguards to ensure that recognition evidence based on CCTV images is reliable, a matter which is troubling given the Act's focus on preventing wrongful convictions. Finally, the practice of permitting the fact-finder to compare images of an offender with the accused in order to determine the issue of identity is potentially fraught and in need of further academic and judicial scrutiny.

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1. INTRODUCTION

Thesis topic

Surveillance is not a new practice. The overt and covert monitoring of people, places and objects is 'as old as recorded history'.[1] However, in the last twenty-five years there has been an unprecedented increase in government and corporate surveillance of individuals.[2] Today, the movements and activities of people around the globe are monitored by a complex web of visual surveillance devices,[3] data surveillance technologies[4] and biometric systems.[5] It is no exaggeration to say that we are living in an 'age of surveillance'[6]; an age where surveillance activities are so diverse and widespread that many consider them to be part of the 'fabric of everyday life'.[7]

Since the 1990s, the use of one particular type of surveillance technology, closed circuit television (CCTV), has increased dramatically.[8] Utilised by both the private and public sectors in numerous countries around the world, CCTV surveillance systems are now in operation on public streets, as well as in shopping centres, hospitals, schools, universities, museums, buses, taxis, trucks, commercial buildings and private residences. The surveillance capabilities of CCTV systems have developed markedly since they were first introduced, so that a CCTV camera today may be able to zoom in and display the text of a message on a mobile

1 New South Wales Law Reform Commission, *Surveillance: An Interim Report*, Report No 98 (2001), [1.5].

2 David Lyon, *Surveillance Studies: An Overview* (Polity Press, 2007), 11.

3 Such as CCTV surveillance systems, body worn video cameras, unmanned aerial vehicles (drones), and mobile telephone cameras.

4 Such as computer software, Radio Frequency Identification (RFID) technologies, data matching software and data mining software.

5 Such as fingerprint and iris scanning.

6 Neil M Richards, 'The Dangers of Surveillance' (2013) 126(7) *Harvard Law Review* 1934, 1936.

7 New South Wales Law Reform Commission, *Surveillance: An Interim Report*, Report No 98 (2001), [1.5].

8 David Lyon, Aaron Doyle and Randy Lippert, 'Introduction' in Aaron; Lippert Doyle, Randy; Lyon, David (ed), *Eyes Everywhere: The Global Growth of Camera Surveillance* (Routledge, 2012) 1.

telephone,[9] or to 'recognise' certain things, such a person's face, a type of gesture, a mode of speech or a licence plate.[10]

The escalation of CCTV surveillance activity in the last twenty-five years has generated a prodigious amount of academic literature. Privacy experts, surveillance studies scholars, sociologists and criminologists have investigated a broad range of issues relating to the nature, scope and effects of CCTV surveillance. [11] Topics canvassed include: the proliferation of CCTV surveillance systems in particular locations (and the reasons behind the proliferation);[12] the effectiveness of CCTV as a method of surveillance;[13] the regulation, management and day-to-day operation of CCTV surveillance systems;[14] public attitudes to

9 'Watch What You Type! Surveillance Cameras So Strong They Can Zoom In To Read Text Messages', *Daily Mail Australia* (online), 7 May 2012 <http://www.dailymail.co.uk/news/article-2140360/Watch-type-Surveillance-cameras-strong-read-text-messages.html>.

10 Note that 'smart' CCTV systems are still in their infancy: see, eg, Yu Shi and Serge Lichman, *Smart Cameras: A Review* <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.456.8520>.

11 Note that the precise definition of 'surveillance studies' remains unsettled: Séverine Germain, Laurence Dumoulin and Anne-Cécile Douillet, 'A Prosperous "Business": The Success of CCTV through the Eyes of International Literature' (2013) 11(1/2) *Surveillance & Society* 134, fn 12.

12 See, eg, S Graham, 'Towards the Fifth Utility? On the Extension and Normalization of Public CCTV' in C Norris and G Armstrong (eds), *Surveillance, CCTV and Social Control* (Ashgate, 1998) 89; M McCahill and C Norris, 'Estimating the Extent, Sophistication and Legality of CCTV in London' in Martin Gill (ed), *CCTV* (Perpetuity Press, 2003) 51; Clive Norris, Mike McCahill and David Wood, 'The Growth of CCTV: A Global Perspective on the International Diffusion of Video Surveillance in Publicly Accessible Space' (2004) 2(2/3) *Surveillance & Society* 110; Kroener I, *CCTV: A Tecnology Under the Radar?* (Farnham, 2014); C Norris and M McCahill, 'CCTV: Beyond Penal Modernism' (2006) 46 *British Journal of Criminology* 97; K Williams and C Johnston, 'The Politics of the Selective Gaze: Closed Circuit Television and the Policing of Public Space' (2000) 34 *Crime, Law and Social Change* 183; N Fyfe and J Bannister, 'City Watching: Closed Circuit Surveillance in Public Spaces' (1996) 28(1) *Area* 37.

13 See, eg, H Keval and M A Sasse, 'Not the Usual Suspects: A Study of Factors Reducing the Effectiveness of CCTV' (2010) 23(2) *Security Journal* 134; D Williams, 'Effective CCTV and the Challenge of Constructing Legitimate Suspicion Using Remote Visual Images' (2007) 4 *Journal of Investigative Psychology and Offender Profiling* 97.

14 Benjamin J Goold, 'Open to All? Regulating Open Street CCTV and the Case for "Symmetrical Surveillance"' (2006) 25(1) *Criminal Justice Ethics* 3; Diane M Hartmus, 'Government Guidelines for CCTV: A Comparison of Four Countries' (2014) 37(6) *International Journal of Public Administration* 329; H Wells, T Allard and P Wilson, 'Crime and CCTV in Australia: Understanding the Relationship' Centre for Applied Psychology and Criminology, <http://epublications.bond.edu.au/hss_pubs/70 >.

CCTV surveillance;[15] resistance to CCTV surveillance;[16] and the social ramifications of the expansion of CCTV systems.[17]

Of particular interest to many researchers and policy makers, however, is the relationship between CCTV surveillance and crime control. CCTV surveillance is a form of situational crime control which aims to increase the risk associated with offending in a particular location.[18] Numerous scholars have investigated the ability of CCTV surveillance systems to deter and detect criminal offending,[19]

15 See, eg, J Ditton, 'Crime and the City: Public Attitudes Towards Open-Street CCTV in Glasgow' (2000) 40 *British Journal of Criminology* 692; Martin Gill, Jane Bryan and Jenna Allen, 'Public Perceptions of CCTV in Residential Areas: "It Is Not As Good As We Thought It Would Be"' (2007) 17(4) *International Criminal Justice Review* 304.

16 See, eg, Gary T Marx, 'A Tack in the Shoe: Neutralizing and Resisting the New Surveillance' (2003) 59(2) *Journal of Social Issues* 369; Torin Monahan, 'Counter-surveillance as Political Intervention?' (2006) 16(4) *Social Semiotics* 515; Dean Wilson and Serisier Tanya, 'Video Activism and the Ambiguities of Counter-Surveillance' (2010) 8(2) *Surveillance & Society* 166.

17 See, eg, David Williams and Jobuda Ahmed, 'The Relationship Between Antisocial Stereotypes and Public CCTV Systems: Exploring Fear of Crime in the Modern Surveillance Society' (2009) 15(8) *Psychology, Crime & Law* 743; L Mazerolle, D C Hurley and M Chamlin, 'Social Behaviour in Public Space: An Analysis of Behavioral Adaptations to CCTV' (2002) 15(1) *Security Journal* 59; Benjamin J Goold, 'Privacy Rights and Public Spaces: CCTV and the Problem of the "Unobservable Observer"' (2010) 21(1) *Criminal Justice Ethics* 21; Beatrice von Silva-Tarouca Larson, *Setting the Watch: Privacy and the Ethics of CCTV Surveillance* (Hart Publishing, 2011).

18 Anthony Morgan et al, *Effective Crime Prevention Interventions for Implementation by Local Government: Australian Institute of Criminology Research and Public Policy Series 120* (2012).

19 See, eg, Rachel Armitage, 'To CCTV or Not to CCTV? A Review of Current Research into the Effectiveness of CCTV Systems in Reducing Crime' NACRO (2002); Emma Short and Jason Ditton, 'Seen and Now Heard: Talking to the Targets of Open Street CCTV' (1998) 38(3) *British Journal of Criminology* 404; Martin Gill and Angela Spriggs, 'Assessing the Impact of CCTV' (2005) Home Office Research Study 292; E Taylor, 'Evaluating CCTV: Why the Findings are Inconsistent, Inconclusive and Ultimately Irrelevant' (2010) 12(4) *Crime Prevention and Community Safety* 209; Pete Fussey, 'Beyond Liberty, Beyond Security: The Politics of Public Surveillance' (2008) 3 *British Politics* 120; Brandon C Welsh and David P Farrington, 'Public Area CCTV and Crime Prevention: An Updated Systematic Review and Meta-Analysis' (2009) 26(4) *Justice Quarterly* 716; B Welsh and D Farrington, 'Crime Prevention Effects of Closed Circuit Television: A Systematic review' Home Office Research Study 252; Nick Tilley, 'Understanding Car Parks, Crime and CCTV: Evaluation lessons from Safer Cities–Crime Prevention Unit Series Paper No 42' Home Office Police Department; Kate Painter and Nick Tilley (eds), *Surveillance of Public Space: CCTV, Street Lighting and Crime Prevention* (Criminal Justice Press, 1999); Jason Ditton and Emma Short, 'Does Closed Circuit Television Prevent Crime?' The Scottish Office Central Research Unit; Jerry H Ratcliff, Travis Taniguchi and Ralph B Taylor, 'The Crime Reduction Effects of Public CCTV Cameras: A Multi-Method Spatial Approach' (2009) 26(4) *Justice Quarterly* 746; D P Farrington et al, 'The Effects of Closed Circuit Television on Crime: Meta-Analysis of an English National Quasi-Experimental Multi-Site Evaluation' (2007) 3(1) *Journal of Experimental Criminology* 21; Eric L Piza, Joel M Caplan and Leslie W Kennedy, 'Is the Punishment More Certain? An Analysis of CCTV Detections and Enforcement' (2014)

while more recent scholarship focuses on the effects of CCTV surveillance on the behaviour of offenders and law enforcement officers[20] (a topic which encompasses the growing use by law enforcement officers of body-worn cameras).[21] In the Australian context, research into CCTV and crime control is still in its infancy. That which does exist includes research into the ability of CCTV cameras to reduce crime,[22] the ability of CCTV surveillance to ameliorate fear of crime;[23] the types of criminal offences detected by CCTV operators;[24] the impact of CCTV surveillance on arrest rates,[25] and public attitudes to CCTV surveillance systems.[26]

While the ability of CCTV surveillance to reduce crime remains hotly contested in the literature, there is little doubt that it is often an extremely useful investigative

31(6) *Justice Quarterly* 1015; D Skinns, 'Crime Reduction, Diffusion and Displacement: Evaluating the Effectiveness of CCTV' in C Norris, J Moran and G Armstrong (eds), *Surveillance, Closed Circuit Television and Social Control* (Ashgate, 1998) 175.

20 Benjamin J Goold, 'Public Area Surveillance and Police Work: The Impact of CCTV on Police Behaviour and Autonomy' (2003) 1(2) *Surveillance & Society* 191; Tim Newburn and Stephanie Hayman, *Policing, Surveillance and Social Control: CCTV and Police Monitoring of Suspects* (Willan Publishing, 2002).

21 See, eg, Mary D Fan, 'Justice Visualized: Courts and the Body Camera Revolution' (Legal Studies Research Paper No 2016–11 University of Washington School of Law, 2016); Michael D White, *Police Officer Body-Worn Cameras: Assessing the Evidence* (Office of Community Oriented Policing Services, 2014); Wesley G Jennings, Lorie A Fridell and Mathew D Lynch, 'Cops and Cameras: Officer Perceptions of the Use of Body-Worn Cameras in Law Enforcement' (2014) 42(6) *Journal of Criminal Justice* 549.

22 See, eg, H Wells, T Allard and P Wilson, 'Crime and CCTV in Australia: Understanding the Relationship' Centre for Applied Psychology and Criminology, <http://epublications.bond.edu.au/hss_pubs/70 >; J Anderson and A McAtamney, *Considering Local Context When Evaluating a Closed Circuit Television System in Public Places—Trends & Issues in Crime and Criminal Justice No 430* (2011), 421.

23 See, eg, Crime Prevention and Community Safety Council and Tasmania Police, *Evaluation of the Devonport CCTV Scheme* (2002).

24 See, eg, H Wells, T Allard and P Wilson, 'Crime and CCTV in Australia: Understanding the Relationship' Centre for Applied Psychology and Criminology, <http://epublications.bond.edu.au/hss_pubs/70 >; R Hayes and D M Downs, 'Controlling Retail Theft with CCTV Domes, CCTV Public View Monitors, and Protective Containers: A Randomized Controlled Trial' (2011) 24(3) *Security Journal* 237.

25 See, eg, H Wells, T Allard and P Wilson, 'Crime and CCTV in Australia: Understanding the Relationship' Centre for Applied Psychology and Criminology, <http://epublications.bond.edu.au/hss_pubs/70 >; Shann Hulme, Anthony Morgan and Rick Brown, 'CCTV use by local government: Findings from a national survey' Research in practice no 40, Australian Institute of Criminology, May 2015

26 See, eg, Office of the Privacy Commissioner, *Community Attitudes to Privacy 2007* (2007); H Wells, T Allard and P Wilson, 'Crime and CCTV in Australia: Understanding the Relationship' Centre for Applied Psychology and Criminology, <http://epublications.bond.edu.au/hss_pubs/70 >; Crime Prevention and Community Safety Council and Tasmania Police, *Evaluation of the Devonport CCTV Scheme* (2002).

tool.[27] No longer reliant on witnesses and the small army of multidisciplinary experts who attempt to reconstruct criminal events, investigators now have the ability to collect visual evidence of past occurrences from a 'constant and unbiased witness with instant and total recall of all that it observed'.[28] Unfortunately, there is very little empirical data about the use of CCTV images in criminal investigations, either overseas or in Australia. Information released by local government councils can provide some indication of the extent of the investigative use of CCTV images. For example, the City of Sydney reported that in 2005–2006 there were 749 applications for CCTV footage, most from the New South Wales (NSW) police, 392 of which resulted in a copy of the incident being provided to law enforcement officers.[29] Further, in mid-2014, a national online survey of local councils in Australia revealed that 81% of local councils had received at least one request for CCTV footage from the police in 2012–13, with 20% receiving approximately one request for week.[30] However, those surveyed had limited information about the way in which this footage was used by police and its impact on any later criminal proceedings.[31]

Despite the lack of data about its actual use by law enforcement officers, media reports often highlight the importance of CCTV in criminal investigations. For instance, the use of evidence derived from CCTV cameras in the investigation of the terrorist attacks on the London Underground in July 2005 and the Boston Marathon bombing in April 2013 has been well-publicised.[32] In Australia, the

27 Tom Levesley and Amanda Martin, 'Police Attitudes to and use of CCTV' (2005) Home Office Report 09/05, 4–5.

28 *R v Nikolovski* [1996] 3 SCR 1197, 1210.

29 Garry Harding and David Cornett, *Council of City of Sydney Meeting Item 5—Expansion of the Street Safety Camera Program* (21 August 2006). In another study of 100 hours of monitoring of the Gold Coast Safety Camera Network in 2006, it was revealed that 181 incidents were surveilled, leading to 51 arrests for offences about which there was CCTV footage: H Wells, T Allard and P Wilson, 'Crime and CCTV in Australia: Understanding the Relationship' Centre for Applied Psychology and Criminology, <http://epublications.bond.edu.au/hss_pubs/70 >.

30 Shann Hulme, Anthony Morgan and Rick Brown, *CCTV Use by Local Government: Findings from a National Survey*, Australian Institute of Criminology Research in Practice No 40 (May 2015), 8.

31 Ibid, 9.

32 See, eg, '7 July Bombers Spotted on CCTV After Exhaustive Hunt', *BBC* (online), 13 October 2010 <http://www.bbc.com/news/uk-11534951>; Christopher Bucktin, 'Boston Bomber Caught on CCTV: FBI Close in on Suspect Seen Dropping Bag in Street', *The*

media has highlighted the value of CCTV surveillance footage in several high profile criminal investigations, including the investigation into the 2012 murder of Jill Meagher in Melbourne and the investigations into the deaths of Thomas Kelly and Daniel Christie (both of whom died after being assaulted in unprovoked incidents in the Kings Cross Area in NSW in 2012 and 2013).[33]

The use of CCTV surveillance images in investigations has obvious ramifications for criminal prosecutions. As Kirby J noted in *Smith v The Queen,* once the investigative stage is over and an offender has been identified, the footage 'may also become evidence relevant to the issues for trial'.[34] In some cases, surveillance images show the crime being committed—the arsonist flicking a match to set a car on fire, the hotel patron smashing a glass into the face of his victim, or the semi-trailer driver ploughing into the back of a stationary car. In other cases, the images are used to piece together the sequence of events before or after an offence—to show the movements of the offender or the victim leading up to the time of the incident, or the direction in which the offender departed the scene of the crime.

In the existing legal and psychological literature, CCTV images belong to a larger class of evidence known as 'visual evidence'. Broadly speaking, visual evidence includes any piece of evidence that has a visual component, such as videotaped interviews and testimony, crime scene videos and photographs, and computer-animations or simulations.[35] Although photographs have long been admissible in

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Mirror (online), 18 April 2013 <http://www.mirror.co.uk/news/world-news/boston-marathon-bomber-caught-cctv-1838523>.

33 See, eg 'Hopes CCTV Will Combat Sydney Violence', *SBS* (online), 6 March 2014 <http://www.sbs.com.au/news/article/2014/03/06/hopes-cctv-will-combat-sydney-violence>; 'A Detective Has Revealed Exactly How Police Caught Jill Meagher's Killer', *Mamamia News* (online), 28 June 2015 <http://www.mamamia.com.au/a-detective-has-revealed-exactly-how-police-caught-jill-meaghers-killer/>; Kate Campbell, 'New CCTV Shows Jill's Last Moments', *The West Australian* (online), 13 March 2013 <https://au.news.yahoo.com/thewest/wa/a/16355470/new-cctv-shows-jills-last-moments/#page1>; 'Meagher Death Prompts Melbourne CCTV Audit', *ABC News* (online), 30 September 2012 <http://www.abc.net.au/news/2012-09-29/baillieu-announces-cctv-review-in-wake-of-meagher-abduction/4287336>.

34 *Smith v The Queen* [2001] HCA 50, [44].

35 See, eg, John Selbak, 'Digital Litigation: The Prejudicial Effects of Computer-Generated Animation in the Courtroom" (1994) 9(2) *High Technology Law Journal* 337; Saul M Kassin and Meghan A Dunn, 'Computer-Animated Displays and the Jury: Facilitative and

legal proceedings,[36] visual evidence has not always played a significant role in legal proceedings. Traditionally, the vast bulk of evidence in criminal proceedings has been given orally. The law's preference for oral evidence in criminal legal disputes rests on several pillars. First, the evidence is given publicly (thereby satisfying requirements of the principle of open justice).[37] Second, the evidence may be tested under cross-examination.[38] And finally,

> [b]y generally restricting the jury to consideration of testimonial evidence in its oral form, it is thought that the jury's discussion of the case in the jury room will be more open, the exchange of views among jurors will be easier, and the legitimate merging of opinions will more easily occur than if the evidence were given in writing or the jurors were each armed with a written transcript of the evidence.[39]

The law's preference for oral evidence may not be shared by all participants in the criminal justice system. Research has demonstrated that jurors often find it difficult to assimilate, understand and recall large amounts of oral evidence,[40] particularly when it is 'boring', 'confusing or repetitive', or technical in nature.[41] In contrast, visual evidence is generally well-absorbed by juries. It is 'efficient, accessible, and memorable'.[42] In light of this, it is unsurprising that, with advances in digital and surveillance technology, visual evidence has become increasingly prevalent in legal proceedings.[43] In fact, legal scholar and historian Jennifer Mnookin argues that today there is a 'primacy of the visual' in evidence

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Prejudicial Effects' (1997) 21(3) *Law and Human Behavior* 269; Robert B; Leibman Bennett Jnr, Jordan H; Fetter, Richard E, 'Seeing is Believing; or is it? An Empirical Study of Computer Simulations as Evidence' (1999) 34(2) *Wake Forest Law Review* 257.

36 Jennifer L Mnookin, 'The Image of Truth: Photographic Evidence and the Power of Analogy' (1998) 10 *Yale Journal of Law and Humanities* 1, 9.

37 *R v Butera* [1987] HCA 58 [15].

38 The Hon P L G Brereton, 'Evidence in Civil Proceedings: An Australian Perspective on Documentary and Electronic Evidence' [2007] *New South Wales Judicial Scholarship* 13.

39 *R v Butera* [1987] HCA 58 [15].

40 New Zealand Law Commission, *Juries in Criminal Trials: Part Two*, Preliminary Paper No 37 (1999), ch 3.

41 Ibid, [3.4].

42 Elizabeth G Porter, 'Taking Images Seriously' (2014) 114 *Columbia Law Review* 1687, 1695.

43 Neal Feigenson, 'Visual Evidence' (2010) 17(2) *Psychonomic Bulletin & Review* 149.

law, or a 'fixation with evidence that can be seen'.[44] Similarly, legal scholar Richard Sherwin notes that 'increasingly, the search for fact-based justice inside the courtroom is becoming an offshoot of visual meaning making'.[45]

The growth in visual evidence has opened up numerous fields of academic inquiry. Some evidence law and visual studies scholars have charted the rise of different types of visual evidence, outlining the benefits and problems associated with using it in the legal context.[46] Others have analysed the admissibility of visual evidence under various evidentiary regimes,[47] the emotional impact of the evidence on the fact-finder,[48] the effect of visual evidence on jury comprehension

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44 Jennifer L Mnookin and Nancy West, 'Theaters of Proof: Visual Evidence and the Law in *Call Northside 777*' (2001) 13 *Yale Journal of Law & the Humanities* 329, 386.

45 Richard K Sherwin, 'Visual Jurisprudence' (2012) 57(1) *New York Law School Law Review* 11, 12.

46 See, eg, M A Dunn, P Salovey and N Feigenson, 'The Jury Persuaded (and not): Computer Animation in the Courtroom' (2006) 28(2) *Law & Policy* 228; Saul M Kassin and Meghan A Dunn, 'Computer-Animated Displays and the Jury: Facilitative and Prejudicial Effects' (1997) 21(3) *Law and Human Behavior* 269; Elizabeth G Porter, 'Taking Images Seriously' (2014) 114 *Columbia Law Review* 1687; Jessica R Gurley and Marcus David K, 'The Effects of Neuroimaging and Brain Injury on Insanity Defences' (2008) 26(1) *Behavioral Sciences and the Law* 85; Neal Feigenson and Meghan A Dunn, 'New Visual Technologies in Court: Directions for Research' (2003) 27(1) *Law and Human Behavior* 109; Richard K Sherwin, Neal Feigenson and Christina Spiesel, 'Law in the Digital Age: How Visual Communication Technologies are Transforming the Practice, Theory and Teaching of Law' (2006) 12 *Boston University Journal of Science and Technology Law* 227; Neal Feigenson, 'Brain Imaging and Courtroom Evidence: On the Admissibility and Persuasiveness of fMRI' (2006) 2(3) *International Journal of Law in Context* 233; Mary D Fan, 'Justice Visualized: Courts and the Body Camera Revolution' (Legal Studies Research Paper No 2016–11 University of Washington School of Law, 2016); Jennifer L Mnookin, 'The Image of Truth: Photographic Evidence and the Power of Analogy' (1998) 10 *Yale Journal of Law and Humanities* 1; Neal Feigenson and Christina Spiesel, *Law on Display: The Digital Transformation of Legal Persuasion and Judgment* (New York University Press, 2009); Richard K Sherwin, Neal Feigenson and Christina Spiesel, 'What is Visual Knowledge, and What is it Good For? Potential Ethnographic Lessons from the Field of Legal Practice' (2007) 20 *Visual Anthropology* 143.

47 See, eg See, eg, Jennifer L Mnookin, 'The Image of Truth: Photographic Evidence and the Power of Analogy' (1998) 10 *Yale Journal of Law and Humanities* 1; Christopher J Buccafusco, 'Gaining/Losing Perspective on the Law, or Keeping Viusal Evidence in Perspective' (2003–2004) 58 *University of Miami Law Review* 609; Jane Campbell Moriarty, 'Flickering Admissibility: Neuroimaging Evidence in the US Courts' (2008) 26(1) *Behavioral Sciences and the Law* 29; Fred Galves, 'The Admissibility of 3-D Computer Animations Under the Federal Rules of Evidence and the California Evidence Code' (2008) 36 *Southwestern University Law Review* 723.

48 David A Bright and Jane Goodman-Delahunty, 'Gruesome Evidence and Emotion: Anger, Blame and Jury Decision-Making' (2006) 30 *Law and Human Behavior* 183; Saul M Kassin and David A Garfield, 'Blood and Guts: General and Trial-Specific Effects of Videotaped Crime Scenes on Mock Jurors' (1991) 21(18) *Journal of Applied Social Psychology* 1459; Kevin S Douglas, David R Lyone and James R P Ogloff, 'The Impact

of factual matters,[49] and the potential for visual evidence to 'warp the allocation of decision making power' between appellate and trial courts.[50]

Of particular concern to many scholars, however, is the interpretation of photographic and filmic evidence by advocates and juries. The fact that video footage of real events can be subject to competing and antithetical interpretations was famously demonstrated in the 1991 trial of four Los Angeles police officers for offences relating to the beating of Rodney King. During the trial, amateur video footage of the offence (filmed by a bystander) was scrutinised and dissected, with defence lawyers freezing the video at various pivotal points to illustrate their clients' version of events (that is, that King was in charge of the situation and posed a threat to the police officers attempting to restrain him).[51] As media and cultural studies scholar John Fiske states, the tape was played 'in such slow motion that the links between action and reaction were stretched until they could be broken'.[52] After the acquittal of three of the police officers, the then President of the United States, George Bush, stated that '[v]iewed from outside the trial, it was hard to understand how the verdict could possibly square with the video'.[53] That is, divorced from the accompanying legal narrative, the images bore a different meaning for a great number of people.

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of Graphic Photographic Evidence on Mock Jurors' Decisions in a Murder Trial: Probative or Prejudicial?' (1997) 21(5) *Law and Human Behavior* 485.

49 Saul M Kassin and Meghan A Dunn, 'Computer-Animated Displays and the Jury: Facilitative and Prejudicial Effects' (1997) 21(3) *Law and Human Behavior* 269; Neal Feigenson, 'Visual Evidence' (2010) 17(2) *Psychonomic Bulletin & Review* 149; Lindsay Hewson and Jane Goodman-Delahunty, 'Using Multimedia to Support Jury Understanding of DNA Profiling Evidence' (2008) 40(1) *Australian Journal of Forensic Sciences* 55; Neal Feigenson and Richard K Sherwin, 'Thinking Beyond the Shown: Implicit Inferences in Evidence and Argument' (2007) 6 *Law, Probability and Risk* 295.

50 Elizabeth G Porter, 'Taking Images Seriously' (2014) 114 *Columbia Law Review* 1687, 1694. See also Mary D Fan, 'Justice Visualized: Courts and the Body Camera Revolution' (Legal Studies Research Paper No 2016–11 University of Washington School of Law, 2016).

51 John Fiske, 'Admissible Postmodernity: Some Remarks on Rodney King, O J Simpson, and Contemporary Culture' (1996) 30 *University of San Francisco Law Review* 917, 918. See also Robert Gooding-Williams (ed), *Reading Rodney King/Reading Urban Uprising* (Routledge, 1993).

52 John Fiske, 'Admissible Postmodernity: Some Remarks on Rodney King, O J Simpson, and Contemporary Culture' (1996) 30 *University of San Francisco Law Review* 917, 919.

53 George Bush, (Speech delivered at the Address to the Nation of the Civil Disturbances in Los Angeles, California, 1 May 1992).

Today, it is well accepted that photographic images do not always bear an indexical relationship to reality so that their meaning is obvious or unambiguous.[54] As legal scholar and historian Katherine Biber notes, '...[s]cholars, theorists, artists and scientists have, for over one century, cautioned us against accepting photography as a way of knowing the truth about the world.'[55] In addition, as legal scholar Jessica Silbey writes (when discussing filmic evidence), '... [f]ilm is a constructed medium. The camera always presents a certain point of view and a frame that includes some images and excludes others'.[56] The issue of the interpretation of photographic or filmic evidence remains highly pertinent today, with scholars examining questions such as who should be permitted to 'read' or interpret an image in the courtroom environment;[57] how the attributes of an image or piece of video footage (including its perspective, angle and framing) affects the way it is interpreted;[58] the impact of demographic characteristics and individual beliefs on image interpretation;[59] and whose interpretation of an image should be preferred.[60]

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54 Jessica Silbey, 'Cross Examining Film' (2008) 8 *University of Maryland Law Journal of Race, Religion, Gender & Class* 17, 20; Glenn Porter and Michael Kennedy, 'Photographic Truth and Evidence' (2012) 44(2) *Australian Journal of Forensic Sciences* 183.

55 Katherine Biber, 'Looking and Knowing: Jurors and Photographic Evidence' (2007) 90 *Reform* 24, 25.

56 Jessica Silbey, 'Cross Examining Film' (2008) 8 *University of Maryland Law Journal of Race, Religion, Gender & Class* 17, 18.

57 Dean Wilson and Serisier Tanya, 'Video Activism and the Ambiguities of Counter-Surveillance' (2010) 8(2) *Surveillance & Society* 166, 172; Aaron Doyle, 'An Alternative Current in Surveillance and Control: Broadcasting Surveillance Footage of Crimes' in Kevin D; Ericson Haggerty, Richard V (ed), *The New Politics of Surveillance and Visibility* (University of Toronto Press, 2006) 199, 211; Katherine Biber, 'The Hooded Bandit: Aboriginality, Photography and Criminality in *Smith v The Queen*' (2002) 13(3) *Current Issues in Criminal Justice* 286.

58 Sara Landström and Pär Anders Granhag, 'Children's Truthful and Deceptive Testimonies: How Camera Perspective Affects Adult Observers' Perception and Assessment' (2008) 15(4) *Psychology, Crime & Law* 381; G Daniel Lassiter et al, 'Videotaped Confessions: Is Guilt in the Eye of the Camera?' in Mark P Zanna (ed), *Advances in Experimental Social Psychology* (Academic Press, 2001) 189; Jennifer J Ratcliff et al, 'Camera Perspective Bias in Videotaped Confessions: Experimental Evidence of its Perceptual Bias' (2006) 12(4) *Journal of Experimental Psychology: Applied* 197; Denise H Whalen and A Blanchard, 'Effects of Photographic Evidence on Mock Juror Judgement' (1982) 12(1) *Journal of Applied Social Psychology* 30; Gareth Norris, 'The Influence of Angle of View on Perceptions of Culpability and Vehicle Speed for a Computer-Generated Animation of a Road Traffic Accident' (2013) 20(2) *Psychiatry, Psychology and Law* 248; Elizabeth G Porter, 'Taking Images Seriously' (2014) 114 *Columbia Law Review* 1687; Glenn Porter, 'CCTV images as evidence' (2009) 41(1) *Australian Journal of Forensic Sciences* 11.

59 Jane Goodman-Delahunty, Edith Greene and Winston Hsiao, 'Construing Motive in Videotaped Killings: The Role of Jurors' (1998) 22(3) *Law and Human Behavior* 257;

An important subset of the existing scholarship addressing the interpretation of visual evidence relates to the identification of offenders from CCTV images. Identification evidence has long occupied a central position in criminal prosecutions. It is of vital importance in all criminal matters for the prosecution to establish, to the requisite standard of proof, that the accused was in fact the person who committed the offence that is the subject of the proceedings. In some cases, identification will not be in dispute, and the focus of the evidentiary contest will be on other prescribed elements of the offence. In others, however, the accused will deny any involvement in the offence and evidence will need to be gathered and adduced to prove that he or she did in fact engage in the criminal conduct. Often, this will be in the form of visual identification evidence—that is, testimonial evidence that establishes (directly or indirectly)[61] that the accused and the offender are the same person.[62]

In a growing number of cases, however, there will be surveillance images depicting the appearance of an offender. When CCTV images of an offender exist and the issue of identity is disputed, it becomes imperative to determine who is depicted in the photographs or footage. For example, who was the man with the 'Mexican moustache' seen entering the Shell Truck Shop in Alice Springs shortly before the 2001 murder of British backpacker Peter Falconio?[63] Who were the three armed men shown robbing the staff of the Narrabeen Sands Hotel after closing time on 17 September 2008?[64] And who was the man who could be seen

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Dan M Kahan, David A Hoffman and Donald Braman, 'Whose Eyes are you Going to Believe? *Scott v Harris* and the Perils of Cognitive Illiberalism' (2009) 122(3) *Harvard Law Review* 837, 841.

60 Dan M Kahan, David A Hoffman and Donald Braman, 'Whose Eyes are you Going to Believe? *Scott v Harris* and the Perils of Cognitive Illiberalism' (2009) 122(3) *Harvard Law Review* 837.

61 *Festa v The Queen* [2001] HCA 72.

62 Visual identification evidence may be distinguished from other forms of proffered identification evidence, such as voice identification or voice comparison evidence, fingerprint evidence or DNA evidence.

63 *R v Murdoch* [2005] NTSC 78.

64 *Honeysett v The Queen* [2014] HCA 29.

at the ATM, emptying Asha Khanna's bank account in the days following the Sydney nurse's brutal murder?[65]

Although popular culture might suggest otherwise, existing technology does not enable computers to accurately recognise faces.[66] Accordingly, in a criminal prosecution, other approaches must be taken to establish the identity of an offender depicted in CCTV images. One method, employed in both Australia and overseas jurisdictions, is to adduce evidence from a witness with expertise in human anatomy or image interpretation. In these cases, the expert witness compares the CCTV image or images in question with a reference image of the accused (usually an arrest photograph) and provides an opinion about the identity of offender. This approach to proving the issue of identity, known as 'facial mapping' or 'body mapping', has generated much discussion among evidence law scholars and judicial officers (which in turn is part of larger debates about the reliability of forensic identification evidence;[67] the ways in which the forensic community and the legal system should interact;[68] and the role of the expert

65 *R v Kaliyanda* (Unreported, Supreme Court of New South Wales, Hislop J, 17 October 2006).

66 Alice J O'Toole et al, 'Comparing Face Recognition Algorithms to Humans on Challenging Tasks' (2012) 9(4) *ACM Transactions on Applied Perception* Article 16.

67 The 1993 decision of the United States Supreme Court, *Daubert v Merrell Dow Pharmaceuticals* 13 S Ct 2786 (1993). generated a truly vast amount of literature on the scientific validity of the forensic sciences and the role of the courts in assessing the reliability of this type of evidence. For a small sample of this literature, see Saks M J, 'Merlin and Solomon: Lessons from the Law's Formative Encounters with Forensic Identificating Science' (1998) 49 *Hastings Law Journal* 1069; Saks M J and Koehler J J, 'The Coming Paradigm Shift in Forensic Identification Science' (2005) 309 *Science* 892; Michael D Risinger et al, 'The Daubert/Kumho Implications of Observer Effects in Forensic Science: Hidden Problems of Expectation and Suggestion' (2002) 90(1) *California Law Review* 1; Michael J Saks and David L Faigman, 'Failed Forensics: How Forensic Science Lost Its Way and How It Might Yet Find It' (2008) 4 *Annual Review of Law and Social Science* 149; Kelly Pyrek, *Forensic Science Under Seige* (Elsevier Academic Press, 2007); Margaret Berger, 'What has a Decade of Daubert Wrought?' (2005) 95 *American Journal of Public Health* S59; Jennifer L Mnookin, 'The Courts, the NAS, and the Future of Forensic Science' (2010) 75 *Brooklyn Law Review* 1209. See also: National Research Council of the National Academy of Sciences, *Strengthening Forensic Science in the United States: A Path Forward* (National Academies Press, 2009); Expert Working Group on Human Factors in Latent Print Analysis, *Latent Print Examination and Human Factors: Improving the Practice through a Systems Approach* (US Department of Commerce, National Institute of Standards and Technology, National Institute of Justice, 2012); Anthony Campbell, *The Fingerprint Inquiry Report* (APS Group Scotland, 2011).

68 Dawn McQuiston-Surrett and Michael J Saks, 'Communicating Opinion Evidence in the Forensic Identification Sciences: Accuracy and Impact' (2008) 59 *Hastings Law Journal* 1159; Gary Edmond et al, 'How to Cross-Examine Forensic Scientists: A Guide for

witness in legal proceedings).[69] To date, when considering the admissibility and use of facial and body mapping evidence in uniform Evidence Act jurisdictions in Australia,[70] the following have been identified as contentious issues:

- the appropriate expertise to be possessed by the witness (for example, is it sufficient for the expert to possess specialised knowledge about anatomy, or should he or she possess specialised knowledge about image interpretation or the process of 'facial mapping' or 'body mapping'?);[71]

- the reliability of expert evidence based on image comparison;[72]

- whether the law permitting the reception of expert opinion evidence about identity incorporates a requirement that it possess a threshold level of reliability;[73]

Lawyers' (2014) 39(2) *Australian Bar Review* 174; Gary Edmond and Andrew Roberts, 'Procedural Fairness, the Criminal Trial and Forensic Science and Medicine' (2011) 33(359) *Sydney Law Review*; Christopher Hamlin, 'Scientific Method and Expert Witnessing: Victorian Perspectives on a Modern Problem' (1986) 16(3) *Social Studies of Science* 485; Gary Edmond, '(Ad)ministering Justice: Expert Evidence and the Professional Responsibilities of Prosecutors' (2013) 34 *University of New South Wales Law Journal* 921.

69 Gary Edmond et al, 'Model Forensic Science' (2016) 48(5) *Australian Journal of Forensic Sciences* 496; Niamh Howlin, 'Special Juries: A Solution to the Expert Witness' (2004) 12 *Irish Student Law Review* 19; William L Foster, 'Expert Testimony—Prevalent Complaints and Proposed Remedies' (1897) 11 *Harvard Law Review* 169.

70 The uniform Evidence Act legislation is as follows: *Evidence Act 1995* (Cth); *Evidence Act 1995* (NSW); *Evidence Act 2001* (Tas); *Evidence Act 2008* (Vic); *Evidence Act 2011* (ACT); *Evidence (National Uniform Legislation) Act 2011* (NT).

71 *R v Jung* [2006] NSWSC 658; *R v Ali Alrekabi* [2007] NSWDC 110; *Honeysett v The Queen* [2014] HCA 29; *Honeysett v The Queen* [2013] NSWCCA 135.

72 Gary Edmond et al, 'Law's Looking Glass: Expert Identification Evidence Derived from Photographic and Video Images' (2009) 20(3) *Current Issues in Criminal Justice* 337; Josh P Davis and Tim Valentine, 'CCTV on Trial: Matching Video Images with the Defendant in the Dock' (2009) 23 *Applied Cognitive Psychology* 482; Gary Edmond and Meintjes van der Walt, 'Blind Justice? Forensic Science and the Use of CCTV Images as Identification Evidence in South Africa ' (2014) 131 *South African Law Journal* 109; Gary Edmond, 'Just Truth? Carefully applying history, philosophy and sociology of science to the forensic use of CCTV images, for example' (2012) 44(1) *Studies in the History and Philosophy of Science* 80; Ruth Costigan, 'Identification from CCTV: The Risk of Injustice' (2007) *Criminal Law Review* 591.

73 *Honeysett v The Queen* [2014] HCA 29; Gary Edmond, 'The Admissibility of Forensic Science and Medicine Evidence Under the Uniform Evidence Law' (2014) 38 *Criminal Law Journal* 136; Gary Edmond, 'Specialised Knowledge, the Exclusionary Discretions and Reliability: Reassessing Incriminating Expert Opinion Evidence' (2008) 31 *University of New South Wales Law Journal* 1.

- whether the evidence is based on the witness' expertise (an area of debate that encompasses concerns about whether the expert gives quantitative evidence that positively identifies the accused or qualitative evidence of similarities between the accused and the offender)[74]; and

- the prejudicial effect of the evidence (including the 'white coat effect' of the evidence, or the fact that it may be unthinkingly accepted by the fact-finder because it is given by an expert).[75]

However, there is another largely unexamined way to prove the identity of an offender depicted in a CCTV image, and that is to adduce evidence from a witness who r*ecognises* the person in the photograph or on the screen. This method of identification is the focus of this thesis. Increasingly, witnesses are volunteering information about the identity of offenders whose images have been captured by CCTV surveillance cameras at the investigative stage. In early 2015, for example, an employee at the Department of Justice saw CCTV images of the man suspected of the stabbing 17-year-old Masa Vukotic in a park in Melbourne and telephoned police with the name of the offender;[76] while in March 2016, the mother of a man involved in a vicious assault on a pedestrian in Parramatta contacted the police to inform them that she recognised her son in the CCTV images they had released.[77]

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74 *R v Tang* [2006] NSWCCA 167; *Morgan v The Queen* [2011] NSWCCA 257; *R v Hawi (No 24)* [2011] NSWSC 1670.

75 *R v Tang* [2006] NSWCCA 167, [13]–[14]; *R v Jung* [2006] NSWSC 658, [67]–[68], [85]; *R v Ali Alrekabi* [2007] NSWDC 110, [36(e)]; *R v Kaliyanda* (Unreported, Supreme Court of New South Wales, Hislop J, 17 October 2006); Neil Vidmar, 'Expert Evidence, the Adversary System, and the Jury' (2005) 95 *American Journal of Public Health* S137; Law Commission, *Expert Evidence in Criminal Proceedings in England and Wales*, Report No 325 (2009) [1.9], [1.15].

76 Tammy Mills, 'How Sean Price was Caught: The CCTV Footage that Unlocked the Case of Masa Vukotic's Murder', *The Age* (online), 17 August 2015 <http://www.theage.com.au/victoria/cctv-footage-unlocked-the-murder-of-masa-vukotic-20150817-gj0kup.html>.

77 David Meddows, 'Mum "Dobs in Son" After Seeing CCTV of Brutal Parramatta Attack', *The Daily Telegraph* (online), 16 March 2016 <http://www.dailytelegraph.com.au/news/mum-dobs-in-son-after-seeing-cctv-of-brutal-parramatta-attack/news-story/33a5d337911552d6e539c4d4bd46efda>.

The increase in the provision of this particular type of assistance to authorities at the investigative stage—that is, information from members of the community or police about the identity of the offender—has gone largely unnoticed in the academic literature. There have been no empirical studies by policing scholars or law enforcement bodies that attempt to quantify the number of offenders identified in this manner, or any attempts to investigate the utility of the information with which police are provided. Further, no research has been conducted on the way in which this information can or should be used during interviews with suspects, or its effect on offenders (including whether or not it is a significant factor in an offender's decision to enter a plea of guilty). These and other related issues are a fertile area for further academic inquiry.

In the realm of legal scholarship, there is a similar paucity of research about the use and utility of this type of evidence in legal proceedings.[78] My thesis fills this gap in the literature by examining the use of this type of evidence—that is 'recognition evidence based on CCTV images'—in criminal prosecutions in NSW. Relying primarily on doctrinal research, but also drawing on my observation fieldwork and scholarship from a diverse range of fields (including visual culture studies, psychology, and media studies), I place pressure on this discrete and under-analysed evidentiary category. In doing so, I contribute to the development of 'a critical and rigorous jurisprudence of the visual'.[79]

78 The absence of research about evidence from CCTV surveillance systems generally in the legal context has been noted by several commentators: see, eg, D Wilson and A Sutton, 'Open-Street CCTV in Australia: A Comparative Study of Establishment and Operation ' Criminology Research Council; H Wells, T Allard and P Wilson, 'Crime and CCTV in Australia: Understanding the Relationship' Centre for Applied Psychology and Criminology, <http://epublications.bond.edu.au/hss_pubs/70 >.

79 Katherine Biber, *Captive Images: Race, Crime, Photography* (Routledge-Cavendish, 2007), xi.

My thesis explores the following questions:

1. Is the *Evidence Act 1995* (NSW) able to adequately accommodate recognition evidence based on CCTV images?
2. Are judicial interpretations of the provisions of the *Evidence Act 1995* (NSW) clear and consistent when recognition evidence based on CCTV images is sought to be adduced?
3. Is the *Evidence Act 1995* (NSW) and the existing case law operating to ensure that recognition evidence based on CCTV images is being adduced and used in a way that helps to achieve the primary aims of the Act — namely, to aid the fact-finding function of the courts, to ensure fairness for the parties, to minimise the risk of wrongful convictions and to avoid any adverse impact on the time and cost of litigation?[80]

The following section provides some background to the main components of these guiding questions. It provides an overview of the purpose, scope and content of the *Evidence Act 1995* (NSW) and explains why this thesis focuses on this Act in particular and not the uniform Evidence Acts more generally. It then discusses the category of identification evidence known as 'recognition evidence', and explains how technological change has resulted in the creation of a new sub-category of this type of evidence referred to in this thesis as 'recognition evidence based on CCTV images'.

Background

The *Evidence Act 1995* (NSW)

In any legal proceeding, certain facts must be established before the dispute can be resolved. While these facts may not reveal what actually happened in the past, they 'must be taken as fixed and true for purposes of the case and for the purposes

80 See below for further discussion of these aims.

of further proceedings on the case'.[81] In other words, while the facts may not establish 'the truth', they operate to help the judge or jury to arrive at a verdict that represents 'a serious attempt to reach conclusions about what occurred in the past'.[82] In adversarial criminal proceedings, the facts which must be proved are the elements of an offence (set out in the substantive law) and the onus is on the prosecutor to establish them to the requisite standard of proof.

Facts are proved by 'evidence' which, although difficult to define, can be described as 'any matter of fact, the effect, tendency or design of which is to produce in the mind a persuasion, affirmative or disaffirmative, of the existence of some other matter of fact'.[83] Evidence comes in three main forms—witness testimony, documents and real evidence.[84] The law of evidence—which developed incrementally in England over a number of centuries[85]—governs the way facts may be proved. It consists of a series of rules that directly or indirectly control the material that may be received by a court, the way the material is presented, and the use that can or should be made of it by the fact-finder.[86]

As the Chief Justice of High Court of Australia has noted, 'there are complex policy considerations underlying rules of evidence.'[87] In a number of jurisdictions in Australia, including in NSW, these are reflected in largely identical pieces of legislation which are known collectively as the uniform Evidence Acts.[88] The initial Acts—the *Evidence Act 1995* (Cth) and the *Evidence Act 1995* (NSW)—

81 D P Derham, 'Truth and the Common Law Judicial Process' (1963) 5 *Malaya Law Review* 338, 344.,

82 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [55].

83 Best (1849) s 11, cited with approval in William Twining, *Rethinking Evidence: Exploratory Essays* (Northwestern University Press, 1994), 179.

84 Ibid.

85 Ellen E Sward, 'A History of the Civil Trial in the United States' (2002) 51 *University of Kansas Law Review* 347, 354.

86 Australian Law Reform Commission, *Reform of Evidence Law*, Discussion Paper No 16 (1980), 3.

87 Chief Justice of New South Wales The Hon T F Bathurst, 'Courting Ceorls and Eorls' (Speech delivered at the 20th Anniversary of the Evidence Act, Sydney, 13 June 2015).

88 *Evidence Act 1995* (Cth); *Evidence Act 1995* (NSW); *Evidence Act 2008* (Vic); *Evidence Act 2011* (ACT); *Evidence Act 2001* (Tas); *Evidence (National Uniform Legislation) Act 2011* (NT). The common law remains the source of the rules of evidence for the remainder of jurisdictions that continue to 'swim against the uniformity tide': Nigel Wilson, 'The Influence of Professor J H Wigmore on Evidence Law in Australia' (2015) 19(1) *International Journal of Evidence & Proof* 29, 31.

were drafted after a lengthy period of review of the law of evidence by the Australian Law Reform Commission (ALRC) and the New South Wales Law Reform Commission (NSWLRC).[89] The remainder were introduced between 2001 and 2011.[90] The Acts reflect the jurisprudential approach promulgated by the American scholar James Bradley Thayer,[91] and later adopted by modern evidence scholars such as William Twining,[92] that evidence law is 'a collection of disparate constraints on freedom of proof and free evaluation of evidence'.[93] In other words, the legislation reflects the proposition that all evidence that is relevant to the resolution of a dispute should be before the fact-finder unless there is a good reason for it to be excluded.

In its first inquiry into the law of evidence, the ALRC noted that there were a number of competing policy considerations to be taken into account in the formulation of any legislation governing the rules of evidence. First, the law should be drafted so as to aid the fact-finding function of the court.[94] The legitimacy of the criminal justice system requires that the fact-finder make a genuine attempt to establish the facts relevant to the determination of the charges against the accused.[95] However, the law should not pursue this goal at all costs. It is also important to ensure that any criminal trial is fair to the parties (and in particular that the accused is able to challenge and meet the case brought against him or her by the prosecution),[96] that the laws minimise the risk of wrongful conviction, and that any adverse impact on the time and cost of proceedings is avoided.[97] As evidence law scholars Jeremy Gans and Andrew Palmer note, while the *Evidence Act 1995* (NSW) does not have a purpose clause, it is clear that it

89 New South Wales, *Parliamentary Debates*, Legislative Assembly, 31 May 1995 (J Shaw, Attorney General, and Minister for Industrial Relations).
90 *Evidence Act 2001* (Tas); *Evidence Act 2008* (Vic); *Evidence Act 2011* (ACT); *Evidence (National Uniform Legislation) Act 2011* (NT).
91 James Bradley Thayer, *A Preliminary Treatise on Evidence at the Common Law* (Little, Brown, and Company, 1898).
92 William Twining, *Rethinking Evidence: Exploratory Essays* (Northwestern University Press, 1994).
93 William L Twining, *Theories of Evidence: Bentham and Wigmore* (Stanford University Press, 1985).
94 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [828]; Australian Law Reform Commission, *Evidence*, Report No 38 (1987), [8].
95 Australian Law Reform Commission, *Evidence*, Report No 38 (1987), [8], [35].
96 Ibid, [8], [34].
97 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [828].

pursues these goals, and perhaps also others (such as promoting access to the law of evidence and protecting important public interests).[98]

In 2005, the ALRC, the NSWLRC and the Victorian Law Reform Commission ('the Commissions') published a report about the operation of the uniform Evidence Acts. The Commissions noted that there were 'no major structural problems with the legislation or with the policy underpinning it'.[99] Nevertheless, they recommended that several changes be made to the Acts to ensure that they were clear, comprehensive and effective. The admissibility and use of recognition evidence based on CCTV images was not comprehensively examined by the Commissions during this inquiry.[100]

The uniform nature of much evidence law in Australian jurisdictions means that this thesis will be of relevance to stakeholders in other jurisdictions. Nevertheless, I have limited the focus of this research to the provisions of the *Evidence Act 1995* (NSW) for a number of reasons. First, the way CCTV images are collected and used by investigators may vary at the state and territory level. For this reason, recognition evidence based on CCTV images may be subject to different controls at the investigative stage depending on the jurisdiction in which it is collected; which is a matter relevant to the discussion in Chapters 5 and 6. Second, criminal law practice and procedure, which may affect the way evidence is adduced and used in practice, will also differ among the jurisdictions. Third, my observation research was limited to criminal matters heard in NSW courts. Finally, the *Evidence Act 2001* (Tas) does not contain several of the provisions relating to identification evidence that are relevant to this research. It should be noted, however, that the existence of uniform evidence legislation has expanded the volume of case law available for analysis and, in some cases, there are indications that judicial approaches to issues involving recognition evidence based on CCTV

98 Jeremy Gans and Andrew Palmer, *Uniform Evidence* (Oxford University Press, 2010), [1.1.2].

99 Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Uniform Evidence Law*, Report No 102 (2005), [1.29].

100 The Commissions did discuss the narrower question of the impact of *Smith v The Queen* [2001] HCA 50 on the admissibility of identification evidence given by police officers: Ibid, ch 9.

images differ among the jurisdictions. Accordingly, where appropriate, I have drawn upon the jurisprudence of other uniform Evidence Act jurisdictions to strengthen and deepen my analysis of the approach to this type of evidence in NSW.

Recognition evidence

The law has identified three distinct categories of visual identification evidence.[101] In *Festa v The Queen*, the High Court described two of these—namely, positive identification evidence and circumstantial identification evidence.[102] Positive identification evidence is evidence that an accused is the same person as the offender.[103] If accepted, it establishes directly the identity of the offender. It is generally given by an eyewitness who observed the offender before, during or after the commission of an offence and later identified the accused as the offender (typically during an identification parade or picture identification process, although the identification may occur after an eyewitness has seen the accused again in some other context).[104]

Circumstantial identification evidence, on the other hand, is not evidence that the accused and the offender are the same person, but rather evidence that the accused resembles the offender in some way. For example, the accused may be similar in age, race, height, or may have similar mannerisms to that of the offender.[105] While circumstantial identification evidence doesn't point directly to the guilt of the offender, as with any circumstantial evidence, it can be used to form the basis of an inference that supports a guilty verdict. Circumstantial identification evidence may vary in strength, depending on the nature of the similarities between the accused and the offender. If the similarities are unusual or particularly distinctive,

101 Departmental Committee on Evidence of Identification in Criminal Cases, 'Report to the Secretary of State for the Home Department of the Departmental Committee on Evidence of Identification in Criminal Cases (Devlin Committee Report)' 1976), [4.1].
102 Note, these two types of identification evidence may also be referred to as 'direct' or 'indirect' identification evidence respectively.
103 *Festa v The Queen* [2001] HCA 72 [54].
104 *Neville v The Queen* [2004] WASCA 62 [35].
105 *Festa v The Queen* [2001] HCA 72, [56].

as for example, in the case of a tattoo or scar, the evidence may be of greater weight than evidence of more commonplace similarities, such as those relating to height or hair colour.[106]

In addition to direct and circumstantial identification evidence, there is a third type of identification evidence that is often referred to in the case law as 'recognition evidence'.[107] This is evidence from a witness that he or she recognises the offender as someone with whom he or she has some degree of prior familiarity. Traditionally, this type of evidence was rarer than direct or circumstantial evidence, and existed only when an eyewitness at the scene of a crime fortuitously recognised an offender. Today, however, advances in technology mean that the act of recognition is not limited to such serendipitous circumstances. When a CCTV surveillance system preserves a record of the appearance of the offender, the act of recognition can occur at any time after the offence has been committed, thereby providing evidence of identification in cases where eyewitness evidence is weak or lacking altogether, or where eyewitnesses or victims are reluctant to testify in criminal proceedings.

If recognition evidence is assigned sufficient weight by the fact-finder, it can be used to prove the identity of the person depicted in a CCTV images. In some cases, when the CCTV images depict 'ground zero', or the moment the offence occurred, this identification may be sufficient to enable the fact-finder to conclude that the accused is guilty of the offence. In other words, after the accused is identified as the offender, all the elements of the offence will be satisfied. In other cases, however, the identification of the person in the CCTV image will not enable the fact-finder to reach the 'ultimate probandum in a single inferential leap'.[108] The identification of the person in the footage as the accused may be part of a chain of factual inferences that ultimately leads to the conclusion that the accused committed the offence.

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106 Ibid.

107 See, eg, *Trudgett v The Queen* [2008] NSWCCA 62; *R v Turnbull* [1977] QB 224; *Davies v The King* [1937] HCA 27.

108 Paul Roberts and Colin Aitken, 'The Logic of Forensic Proof: Inferential Reasoning in Criminal Evidence and Forensic Science' (Practitioner Guide No 3 Royal Statistical Society, [2.10].

Terminology

The following section briefly clarifies some of the terminology used throughout this thesis and explains the reasons that it has been adopted. It begins by discussing the term 'closed-circuit television' and concludes by setting out the various terms used to describe actors in the criminal justice system.

Closed-circuit television (CCTV)

Closed-circuit television (CCTV) is a type of visual surveillance technology first deployed in Durham, England, in the mid-twentieth century for traffic management purposes. [109] The simplest CCTV system comprises a fixed camera which records and transmits visual images via a cable to a monitor.[110] The system is 'closed circuit' in the sense that the images aren't broadcast more widely, as is the case with broadcast television.

Today, CCTV systems vary greatly, from the simple to the highly sophisticated. This is due to the fact that each component of a CCTV system can vary in design and technological capacity. For example, a CCTV system may utilise a rudimentary, analogue camera that records images onto a physical tape, or a state-of-the-art digital camera that records images onto a computer. CCTV cameras may be deployed individually or as part of a system comprising hundreds of cameras. They may observe a limited geographic area, such as a cash register, or a wide expanse of public space, such as a park. They may record images in time-lapse, or real time.

The surveillance capacity of CCTV systems depends on a number of factors in addition to the number, type and location of the CCTV cameras. An important aspect of any CCTV surveillance system is the way in which the data captured by

109 Leon Hempel and Eric Töpfer, 'Urban Eye Inception Report' (Working Paper No 1 Centre for Technology and Society Technical University Berlin, 8.

110 Clive Norris, 'Closed-Circuit Television: A Review of its Development and its Implications for Privacy' in Shlomo Giora; Knepper Shoham, Paul; Kett, Martin (ed), *International Handbook of Criminology* (CRC Press, 2010) 395, 396.

the cameras is *used*.[111] The latter factor gives CCTV surveillance systems their 'sociotechnical' status.[112] As criminologist Heidi Lomell notes, 'active use of six cameras can be more intensive than limited use of 300.'[113] A CCTV system may be unmonitored and its images only retrieved and examined if the perceived need to do so arises. Alternatively, it may be monitored 24 hours a day by police, security personnel or other trained staff in large control rooms that resemble 'the Bridge of the Starship Enterprise'.[114] In these control rooms, staff may actively use the system's cameras to track the movements or activities of particular individuals[115] and feed this information into on-the-street policing operations.[116] Alternatively, police officers may be able to access the images recorded by these systems via computers located in police stations or on handheld portable devices, such as iPads and other tablets.[117]

While CCTV is relatively easy to describe, it is more difficult to define. As legal and surveillance studies scholar Benjamin Goold notes, 'it is surprisingly difficult to find a definition of closed circuit television in the literature of surveillance or crime prevention.'[118] Definitions of CCTV are also noticeably absent in the work of law reform bodies and government agencies. The most commonly cited definition, promulgated by Goold, is that CCTV is 'any system in which a number of video cameras are connected in a closed circuit or loop, with the images produced being sent to a central television monitor or recorder'.[119]

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111 Heidi Mork Lomell, 'Targeting the Unwanted: Video Surveillance and Categorical Exclusion in Oslo, Norway' (2004) 2(2/3) *Surveillance & Society* 348.

112 Séverine Germain, Anne-Cécile Douillet and Laurence Dumoulin, 'The Legitimization of CCTV as a Policy Tool' (2012) 52 *British Journal of Criminology* 294.

113 Heidi Mork Lomell, 'Targeting the Unwanted: Video Surveillance and Categorical Exclusion in Oslo, Norway' (2004) 2(2/3) *Surveillance & Society* 348, 349.

114 Clive Norris, 'Closed-Circuit Television: A Review of its Development and its Implications for Privacy' in Shlomo Giora; Knepper Shoham, Paul; Kett, Martin (ed), *International Handbook of Criminology* (CRC Press, 2010) 395, 404.

115 Clive Norris, Mike McCahill and David Wood, 'The Growth of CCTV: A Global Perspective on the International Diffusion of Video Surveillance in Publicly Accessible Space' (2004) 2(2/3) *Surveillance & Society* 110.

116 Clive Norris, 'Closed-Circuit Television: A Review of its Development and its Implications for Privacy' in Shlomo Giora; Knepper Shoham, Paul; Kett, Martin (ed), *International Handbook of Criminology* (CRC Press, 2010) 395, 404.

117 Ibid.

118 Benjamin J Goold, 'Privacy Rights and Public Spaces: CCTV and the Problem of the "Unobservable Observer"' (2010) 21(1) *Criminal Justice Ethics* 21, fn 1.

119 Benjamin J Goold, *CCTV and Policing: Public Area Surveillance and Police Practices in Britain* (Oxford University Press, 2004), 12.

For the purposes of this thesis, however, a broader definition of CCTV has been adopted—that is, CCTV is defined as 'a monitoring system that uses video cameras as a means of surveillance'.[120] This definition reflects the fact that, increasingly, CCTV is used as a generic term for surveillance camera systems.[121] In addition, it removes the focus from the technology behind the image recording system and places it on the *purpose* of the system—that is, general surveillance, or the routine collection of data about large masses of people, often through the use of technologies that are inexpensive, unobtrusive, automated and remote,[122] in order to prevent or detect crime. Accordingly, the CCTV images discussed in this thesis could originate from any number of visual surveillance systems—permanent or semi-permanent, fixed or mobile, public or private—provided the purpose of the system is to prevent or detect crime through general (as opposed to targeted) surveillance. When applied, this definition will exclude other forms of photographic and filmic visual evidence, such as video footage acquired fortuitously by bystanders ('witness footage'), images recorded by protesters for counter-surveillance purposes ('activist footage'), images recorded by participants in criminal activity ('offender footage') and images recorded by law enforcement officers during specific investigations ('targeted police surveillance footage'). It may, however, cover images recorded by point-of-view surveillance devices worn by police officers and imagery captured by unmanned aerial vehicles (drones) if they are recorded indiscriminately, and not for the purposes of investigating any particular person or activity.

At this point, it is important to note that among some commentators the use of the term 'CCTV' is falling into disfavour. This is primarily because the initialism, which is technology-specific, reflects largely obsolete technology. As noted above, first generation CCTV systems comprised one or more cameras that were

120 Benjamin J Goold, 'Privacy Rights and Public Spaces: CCTV and the Problem of the "Unobservable Observer"' (2010) 21(1) *Criminal Justice Ethics* 21.

121 Victorian Law Reform Commission, *Surveillance in Public Places*, Report No 18 (2010), 7.

122 Gary T Marx, 'What's New About the "New Surveillance"? Classifying for Change and Continuity' (2002) 1(1) *Surveillance & Society* 9.

connected in a closed electronic circuit or loop.[123] The visual display device for these systems was a television screen. Hence, the term 'closed circuit television' accurately reflected the technology used for the surveillance when it was first deployed. Today, however, as a result of advances in technology, many CCTV systems use networked digital cameras that can stream footage to the internet, which can then be viewed on a variety of visual display devices, including computer screens, mobile telephones and tablets. Accordingly, the surveillance systems are no longer 'closed circuit'[124] and the images captured by the cameras are not always displayed on a television screen. This has led some commentators to suggest abandoning the use of 'CCTV'. For example, the Royal Academy of Engineers has stated that '[t]he continued use of the term is an indicator of a general lack of awareness of the nature of contemporary surveillance, and disguises the kinds of purposes, dangers and possibilities of current technologies'.[125] Other scholars have avoided using the term CCTV for other reasons, such as the fact that it does not translate well into all languages.[126] The terms 'public webcams',[127] 'camera surveillance' and 'video surveillance'[128] have been suggested as alternatives to 'CCTV'.

In this thesis, I maintain the use of the term CCTV for a number of reasons. First, the term is widely used and understood in public, legal, law enforcement and

123 Benjamin J Goold, 'Privacy Rights and Public Spaces: CCTV and the Problem of the "Unobservable Observer"' (2010) 21(1) *Criminal Justice Ethics* 21, fn 1; Joseph Ferenbok and Andrew Clement, 'Hidden Changes: From CCTV to 'Smart' Video Surveillance' in Aaron; Lippert Doyle, Randy; Lyon, David (ed), *Eyes Everywhere: The Global Growth of Camera Surveillance* (Routledge, 2012) 218, 219.

124 Victorian Law Reform Commission, *Surveillance in Public Places*, Report No 18 (2010) [2.3].

125 The Royal Academy of Engineering, *Dilemmas of Privacy and Surveillance: Challenges of Technological Change* (2007), 33.

126 Hille Koskela, '"The Gaze without Eyes": Video-Surveillance and the Changing Nature of Urban Space' (200) 24 *Progress in Human Geography* 243, 261.

127 In its 2007 report on privacy and surveillance, the Royal Academy of Engineers in the United Kingdom proposed using the term 'public webcams' (despite acknowledging that most surveillance cameras don't actually broadcast to the web): The Royal Academy of Engineering, *Dilemmas of Privacy and Surveillance: Challenges of Technological Change* (2007), 33.

128 Aaron Doyle, Randy Lippert and David Lyon (eds), *Eyes Everywhere: The Global Growth of Camera Surveillance* (Routledge, 2012); Hille Koskela, '"The Gaze without Eyes": Video-Surveillance and the Changing Nature of Urban Space' (200) 24 *Progress in Human Geography* 243, 261.

academic discourse in Australia and overseas.[129] Next, the term usefully differentiates between different types of camera surveillance, quickly excluding from consideration covert surveillance by law enforcement authorities or 'sousveillance' by individuals.[130] Third, the term has an established history, and to adopt different language may result in unnecessary terminological complexity in parts of this thesis that engage with existing literature, cases or public debates on CCTV surveillance. Finally, from a purely pragmatic perspective, the initialism is short and needs no further qualification when used.

'Offender', 'suspect', 'accused' and 'fact-finder'

Throughout this thesis, the term 'offender' is used to refer to a person who can be seen on CCTV images committing an offence or who, by virtue of other evidence, appears likely to be the person who committed the offence. The inference that the person was the offender may be raised in a number of ways, including by the person's presence at or around the time of the offence, or the clothing worn by the person. The term 'suspect' is used to refer to a person who has been arrested and charged with an offence, but against whom criminal proceedings have not been commenced. Although the language of the *Evidence Act 1995* (NSW) uses the term 'defendant', in keeping with the traditional approach of the higher courts and the case law in NSW, the word 'accused' is used to refer to a person against whom legal proceedings have been commenced. 'Fact-finder' is used to refer to the person or people entrusted with the role of determining the facts in a criminal prosecution. In some cases, the fact-finder may be a magistrate, while in other cases it could be a jury member or a trial judge.

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129 See, eg, Australia New Zealand Policing Advisory Agency and National Institute of Forensic Science, *Australia and New Zealand Police Recommendations for CCTV Systems* (2014); Robert Carr, 'Surveillance Politics and Local Government: A National Survey of Federal Funding for CCTV in Australia' (2014) *Security Journal* 1; New South Wales Government, *NSW Government Policy Statement and Guidelines for the Establishment and Implementation of Closed Circuit Television in Public Places* (2014).

130 'Sousveillance' is inverse surveillance and is employed, usually by individuals, as a response to organisational surveillance. It focuses on 'enhancing the ability of people to access and collect data about their surveillance and to neutralize surveillance': Steven Mann, Jason Nolan and Barry Wellman, 'Sousveillance: Inventing and Using Wearable Computing Devices for Data Collection in Surveillance Environments' (2003) 1(3) *Surveillance & Society* 331, 333.

Aims of thesis

Technological change and the law of evidence

The law of evidence aims to ensure that the fact-finder can discover the truth, or something close to the truth, both fairly and efficiently.[131] For this reason, it is of vital importance to the administration of justice and to public confidence in the justice system. It has been noted that '[e]stablishing a set of sound evidence rules and a refined evidence system is extremely important to promote the construction of rule of law, to realize judicial fairness and social fairness and justice in order to build a harmonious society.'[132]

The absence of a principled, efficient and effective body of evidence law increases the risk of miscarriages of justice. The consequences of a miscarriage of justice can vary. In the case of a wrongful conviction, an innocent person may receive a custodial sentence or some other sentencing option that involves a deprivation of liberty.[133] In addition, he or she may suffer adverse personal, social and administrative consequences (including, but not limited to, a reduction in employment opportunities and stigmatisation).[134] The undesirability of these consequences is compounded by the obvious fact that the person who actually committed the offence remains unpunished and potentially able to reoffend in the future; which is also the consequence of a miscarriage of justice occasioned by a wrongful acquittal. Wrongful convictions may also have significant economic costs for the state, such as the costs associated with protracted appellate proceedings and compensation for wrongful imprisonment. They may also

131 Chief Justice of New South Wales The Hon T F Bathurst, 'Courting Ceorls and Eorls' (Speech delivered at the 20th Anniversary of the Evidence Act, Sydney, 13 June 2015).

132 Deyong Shen, Executive Vice President of the Supreme People's Court of China, cited in Baosheng Zhang, *Reflecting on the Development of Evidence Law in China*, 9 <http://www.cicjc.com.cn/en/node/2069>.

133 To review the sentencing options available in New South Wales, see: *Crimes (Sentencing Procedure) Act 1999 1999* (NSW).

134 The Law Commission, *Expert Evidence in Criminal Proceedings in England and Wales*, Report No 25 (2011), 181; Australian Law Reform Commission, *Same Crime, Same Time*, Report No 103 (2006), [7.76].

seriously undermine public confidence in the effectiveness of a criminal justice system.[135]

Accordingly, it is vitally important to ensure that the law of evidence continues to operate smoothly, consistently and fairly despite the passage of time. By examining the way the *Evidence Act 1995* (NSW) regulates the admissibility and use of a new and increasingly prevalent type of evidence—recognition evidence based on CCTV images—this thesis aims to ensure that the law remains appropriately adapted to technological change. It provides information that will be of use to policy makers and judges who are seeking to better regulate the use of the evidence and to lawyers who seek to adduce the evidence in legal proceedings.

The battle of public interests: Privacy versus crime control

Another subsidiary aim of this thesis is to contribute to the public debate on the use and expansion of CCTV surveillance systems in Australia (and NSW in particular). CCTV surveillance is a contested activity. While it has many potential benefits, it also has an impact on a number of important civil liberties. In particular, it represents an intrusion into an individual's right to privacy.[136] Although a majority of CCTV surveillance systems are set up in public spaces, an individual may still have a reasonable, albeit diminished, expectation of privacy in a public or semi-public space. As penal theory scholar Andrew Von Hirsch notes, established social conventions delineate the boundaries of acceptable behaviour in

135 Law Commission, *The Admission of Expert Evidence in Criminal Proceedings in England and Wales: A New Approach to the Determination of Evidentiary Reliability*, Consultation Paper No 190 (2009), [2.33].

136 Privacy is an internationally recognised human right that is protected in international instruments, such as the *International Covenant on Civil and Political Rights*, 16 December 1966, [1980] ATS 23 (entered into force generally on 23 March 1976), art 17; *United Nations Universal Declaration of Human Rights*, GA Res 217A(III), UN Doc A/Res/810 (1948) art 12. See also *European Convention for the Protection of Human Rights and Fundamental Freedoms*, opened for signature 4 November 1950, 213 UNTS 221 (entered into force 3 September 1953), art 8. Despite this, it is a nebulous concept that is notoriously difficult to define: New Zealand Law Commission, *Conceptual Approach to Privacy*, Miscellaneous Paper No 19 (2007), [37].

public places.[137] The 'conventions of anonymity' operate to ensure that each individual has an expectation of relative obscurity in public spaces. While a person may expect to be the subject of casual observation in a public place, he or she does not necessarily expect to be the subject of intense or prolonged scrutiny of others.[138] In addition, while a person may expect to be observed by others while in public, he or she does not necessarily expect that his or her activities will be recorded by others so that they can be studied or reviewed at a later date or so that he or she can be identified. As Helen Nissenbaum argues, the notion of privacy in public spaces is contextual, so that that surveillance in public spaces may violate standard informational norms about the appropriate collection and use of personal information.[139]

In breaching the privacy of individuals, CCTV surveillance systems may also have an impact on other freedoms, such as freedom of speech, freedom of movement and freedom of association.[140] For example, CCTV systems may have a 'chilling effect' on the behaviour of individuals, so that they no longer speak, move or interact in a free and uninhibited manner when they are aware that they are or may be under surveillance. This is particularly so when the identity of the person or persons observing the images captured by the surveillance system is unknown.[141] This self-censorship may affect 'belief formation and idea generation'[142] in society by discouraging the discussion and open analysis of new or potentially deviant thoughts and concepts.[143] It can also inhibit natural social

137 Andrew von Hirsch, 'The Ethics of Public Television Surveillance' in Andrew; Garland von Hirsch, David; Wakefield, Alison (ed), *Ethical and Social Perspectives on Situational Crime Prevention* (Hart Publishing, 2000) 59.

138 Ibid.

139 Helen Nissenbaum, 'Privacy as Contextual Integrity' (2004) 79 *Washington Law Review* 119.

140 Australian Law Reform Commission, *Serious Invasions of Privacy in the Digital Era*, Report No 123 (2014), [2.6]; New Zealand Law Commission, *Invasion of Privacy: Penalties and Remedies*, Report No 113 (2010), 11; New Zealand Law Commission, *Invasion of Privacy: Penalties and Remedies*, Issues Paper No 14 (2009) 201–204.

141 Benjamin J Goold, 'Privacy Rights and Public Spaces: CCTV and the Problem of the "Unobservable Observer"' (2010) 21(1) *Criminal Justice Ethics* 21, 24.

142 Neil M Richards, 'The Dangers of Surveillance' (2013) 126(7) *Harvard Law Review* 1934, 1946.

143 Ibid, 1948.

interaction between individuals and result in individuals not entering specific places or specific places at specific times.[144]

In addition to the threat to civil liberties posed by the expansion of CCTV surveillance, there is a risk that the data collected by means of this form of surveillance will be misused. As legal scholar Neil Richards notes, surveillance can also raise the risk of harm from blackmail, coercion or discrimination.[145] In the case of CCTV surveillance, there are concerns about voyeurism among CCTV operators; unauthorised release of titillating images by CCTV operators;[146] and discrimination based on stereotypes and profiling methods.[147]

The civil liberties outlined above—the right to privacy, freedom of speech, freedom of movement and freedom of expression—are not absolute. They must 'coalesce with other highly cherished values in an inextricably complicated social world of human interaction'.[148] In the case of CCTV surveillance, the public good to be 'balanced' against CCTV surveillance is security. If CCTV surveillance systems deter and detect criminal offending, the right to individual privacy and the other civil liberties noted above may more readily give way to the right to security (of both people and property). On the other hand, 'it would be particularly obnoxious and sad if we are progressively surrendering privacy and valued liberties for nil or limited positive outcomes in public safety and crime prevention.'[149]

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144 Moira Paterson, 'Surveillance in Public Places and the Role of the Media: Achieving an Optimal Balance' (2009) 14 *Media and Arts Law Review* 241, 249.

145 Neil M Richards, 'The Dangers of Surveillance' (2013) 126(7) *Harvard Law Review* 1934, 1936.

146 Oliver Bennett, 'Here's Looking at You', *The Independent* (online), 3 December 1995 <http://www.independent.co.uk/life-style/heres-looking-at-you-1523805.html>.

147 Roy Coleman, *Reclaiming the Streets: Surveillance, Social Control and the City* (Willan, 2004); Leon Hempel and Eric Töpfer, 'Urban Eye Inception Report' (Working Paper No 1 Centre for Technology and Society Technical University Berlin, 65; Heidi Mork Lomell, 'Targeting the Unwanted: Video Surveillance and Categorical Exclusion in Oslo, Norway' (2004) 2(2/3) *Surveillance & Society* 348; Ann Rudinow Sætnan, Heidi Mork Lomell and Carsten Wiecek, 'Controlling CCTV in Public Spaces: Is Privacy the (Only) Issue? Reflections on Norwegian and Danish Observations' (2004) 2 (2/3) *Surveillance & Society* 396.

148 New Zealand Law Commission, *Conceptual Approach to Privacy*, Miscellaneous Paper No 19 (2007), [73].

149 New South Wales Council for Civil Liberties, *Submission–City of Sydney Council Street Safety Camera Program* (April 2011).

To date, the social, political and academic debate about the expansion of CCTV surveillance has centred on the effectiveness of CCTV systems. Much empirical work has focused on their ability to reduce crime[150] and their apparent failure to do so is often cited as a reason to cease deploying them.[151] However, it is largely overlooked that crime reduction may be indirect. If CCTV images contribute to the conviction of an offender, this may, in turn, have an effect on rates of criminal activity. If, for example, he or she is imprisoned, the offender may be physically prevented from reoffending for a period of time. Alternatively, he or she may be deterred from committing further offences (individual deterrence) and his or her punishment may deter others from engaging in similar activity (general deterrence). Finally, the sanction imposed may rehabilitate the offender, which would again reduce the reoffending in the future.

Accordingly, the role of CCTV images in securing guilty pleas and convictions is of great importance to the debate about the desirability of CCTV surveillance generally.[152] By examining the admissibility, use and weight of CCTV images at the prosecution stage of the criminal justice process, this research will contribute to broader discussions about the utility of CCTV surveillance in reducing crime, the appropriate limits to be placed on public expenditure on CCTV surveillance, and the impact of surveillance on civil liberties.

150 For a review of research on effectiveness of CCTV in reducing and deterring crime, see Clive Norris, 'Closed-Circuit Television: A Review of its Development and its Implications for Privacy' in Shlomo Giora; Knepper Shoham, Paul; Kett, Martin (ed), *International Handbook of Criminology* (CRC Press, 2010) 395.

151 See Beatrice von Silva-Tarouca Larson, *Setting the Watch: Privacy and the Ethics of CCTV Surveillance* (Hart Publishing, 2011). See also D Wilson and A Sutton, 'Open-Street CCTV in Australia: A Comparative Study of Establishment and Operation ' Criminology Research Council, 6.

152 As Pete Fussey notes, the ambiguous deterrent effect of CCTV surveillance makes it 'reasonable to expect that the post-event evidential applications of the cameras will become more important in the coming years': Pete Fussey, 'Beyond Liberty, Beyond Security: The Politics of Public Surveillance' (2008) 3 *British Politics* 120, 123.

Overview of methodology

Doctrinal research

It has not generally been customary for legal scholars or post-graduate law students to identify or explain their research methodology.[153] This may be because much legal research is doctrinal and the doctrinal method, which involves the location, synthesis, evaluation, interpretation and critique of legal rules,[154] is intuitively understood and appreciated by the readers of this research, namely, other lawyers.[155] It may also be because the doctrinal method, which requires the researcher to engage in inductive, deductive and analogistic reasoning, is inherently difficult to describe.[156] Nevertheless, in recent years it has been considered desirable for legal scholars to explicitly articulate their research methodology and chosen research methods.[157]

As the above discussion indicates, the use of CCTV images in legal proceedings sits at the intersection of several large areas of academic inquiry; including surveillance studies, visual culture studies and psychology. However, while my thesis draws from these areas, it focuses squarely on a separate issue—the application of the law of evidence to a particular type of evidence that is dependent upon CCTV images, that is, recognition evidence based on CCTV images. As such, I have relied heavily on the doctrinal research method. Much of my research has involved the review of primary legal sources,[158] although to

153 Christopher McCrudden, 'Legal Research and the Social Sciences' (2006) 122 *Law Quarterly Review* 632. See also Hervé Tijssen, *De Juridische Dissertatie Onder de Loep: De Verantwoording van Methodologische Keuzes in Juridische Dissertaties* (PhD Thesis, University of Tilburg, 2009), cited in Mathias M Siems and Daithí Mac Síthigh, 'Mapping Legal Research' (2012) 71(3) *Cambridge Law Journal* 651, 667.

154 I J Kroeze, 'Legal Research Methodology and the Dream of Interdisciplinarity' (2013) 16(3) *Potchefstroom Electronic Law Journal* 35, 49. See also Terry Hutchinson and Nigel Duncan, 'Defining and Describing What We Do: Doctrinal Legal Research' (2012) 17(1) *Deakin Law Review* 83.

155 Terry Hutchinson and Nigel Duncan, 'Defining and Describing What We Do: Doctrinal Legal Research' (2012) 17(1) *Deakin Law Review* 83, 99.

156 Ibid, 105, 110.

157 Ibid, 119.

158 I J Kroeze, 'Legal Research Methodology and the Dream of Interdisciplinarity' (2013) 16(3) *Potchefstroom Electronic Law Journal* 35, 49. See also Terry Hutchinson and Nigel Duncan, 'Defining and Describing What We Do: Doctrinal Legal Research' (2012) 17(1) *Deakin Law Review* 83.

effectively interpret and critique these sources I have been required to consider the 'history, philosophy, comparative perspective and socio-political context'[159] of the law. It is through this 'paradigmatic'[160] text-based form of research that I have been able to closely critique the content and scope of existing rules of evidence and identify inconsistencies and ambiguities in the way in which they have been interpreted by the courts.

While a large component of doctrinal research involves critiquing existing laws, it has long had a prescriptive element'.[161] In accordance with this tradition, my thesis canvasses ways to address deficiencies in existing rules of evidence and problems associated with their application by the courts. In some cases, a number of potential options for reform are discussed while, in other cases, firmer suggestions are made for changes to the law, practice or procedure that would 'improve the accuracy of verdicts'.[162]

One of the limitations of doctrinal research, however, is that it is does not always reveal the way in which the law is applied in practice. Indeed, it can lead to 'appellate court-itis', or 'the tendency to concentrate far too much attention on the work of appellate courts and disputed questions of law ... with a corresponding almost total neglect of the work of trial courts and disputed questions of fact.'[163] In the field of evidence law in particular, it has been suggested that issues are 'most effectively analysed and understood in the context of the practical legal process within which they arise.'[164] For this reason, the doctrinal analysis in this

159 I J Kroeze, 'Legal Research Methodology and the Dream of Interdisciplinarity' (2013) 16(3) *Potchefstroom Electronic Law Journal* 35, 49.

160 Terry Hutchinson and Nigel Duncan, 'Defining and Describing What We Do: Doctrinal Legal Research' (2012) 17(1) *Deakin Law Review* 83, 108.

161 Roger C Park, 'Evidence Scholarship, Old and New' (1991) 75 *Minnesota Law Review* 849, 865; Roger C Park and Michael J Saks, 'Evidence Scholarship Reconsidered: Results of the Interdisciplinary Turn' (2006) 47 *Boston College Law Review* 949, 955.

162 Roger C Park and Michael J Saks, 'Evidence Scholarship Reconsidered: Results of the Interdisciplinary Turn' (2006) 47 *Boston College Law Review* 949, 1031.

163 William Twining, *Rethinking Evidence: Exploratory Essays* (Northwestern University Press, 1994), 157.

164 Andrew Ligertwood, 'Teaching Evidence Scholarship: Evidence and the Practical Process of Proof' in Paul; Redmayne Roberts, Mike (ed), *Innovations in Evidence and Proof: Integrating Theory, Research and Teaching* (2007) 239, 239.

thesis is supplanted and enriched by a component of empirical research which is discussed further below.

Observation fieldwork

While researching and writing this thesis, I watched part or all of eight different criminal matters listed for hearings in NSW (see Table 1.1). This research method, which was approved by the Human Research Ethics Committee of the University of Technology, Sydney, is a form of 'participant observation', a qualitative research method which 'provides the opportunity to collect data where it is important to capture human behavior in its broad natural context at several different times and from a multitude of perspectives'.[165]

Of the matters I observed, five were trial proceedings in the District Court and one was a trial proceeding in the Supreme Court. I also observed two appeal matters; one in the NSW Court of Criminal Appeal and one in the High Court of Australia. In two of the trial matters, I observed the conduct of the case from the arraignment of the accused to the delivery of the verdict. One of the matters was a 'judge-alone' trial, conducted pursuant to s 132 of the *Criminal Procedure Act 1986* (NSW), while the other was a jury trial. In the remaining four trial matters, the proceedings did not proceed to a verdict for a variety of reasons. In one case, the jury was discharged after the opening address of a defence barrister, while in another both of the accused entered pleas of guilty to an alternative charge on the indictment on the fourth day of the trial. In a third, the proceedings concluded when the trial judge ruled certain items of the prosecution's evidence inadmissible (a ruling which was then subject to an appeal subject to s 5F of the *Criminal Appeal Act 1912* (NSW)). In the last matter, time constraints meant that I was only able to watch the *voir dire*, which took place over a period of three days, and not the trial proceedings, which were listed to commence on a later date.

165 James M Glaser, 'The Challenge of Campaign Watching: Seven Lessons of Participant Observation Research' (1996) 29(3) *Political Science and Politics* 533, cited in Barbara L Paterson, Joan L Bottorff and Roberta Hewat, 'Blending Observational Methods: Possibilities, Strategies and Challenges' (2003) 2(1) *International Journal of Qualitative Methods* 1, 3.

As publicly available court lists do not contain any information about the nature of the evidence to be adduced in the case, it was difficult to locate appropriate cases to observe. Ultimately, I relied on a combination of information from professional contacts I had formulated during my time working as a solicitor in criminal law, court lists and media reports to select cases to view. For the most part, I sat in the public gallery of the courtroom during the proceedings, which was at times crowded and noisy, and at other times virtually deserted (although in the trial matter involving a jury I was asked to leave the courtroom during the jury empanelment process). I did not seek permission to watch any of the cases as the principle of open justice requires legal proceedings to be conducted in public (so that justice is not only done, but is 'manifestly and undoubtedly ... seen to be done').[166] However, in each instance I informed the judge's Associate of the nature and purpose of my observation research. In no case was there any indication that my presence affected the conduct of any of the participants in the proceedings (a matter which is unsurprising given that courtrooms are frequented by a variety of people for different purposes, and that the behaviour of those involved in criminal proceedings is regulated by a variety of means, including rules of professional conduct and the prospect of appellate review).

In the majority of cases I took notes during the proceedings and felt comfortable doing so. However, in one matter heard in rural NSW, I was one of the only people observing the proceedings and my presence on a seat in an elevated public gallery, combined with the fact that I had received a public introduction and welcome from the trial judge, made me feel rather conspicuous. In this matter, I decided not to take notes during the proceedings, and instead tried to write down everything that had occurred from my memory during court breaks; an approach for which I was particularly grateful for having adopted when I was permitted to sit in the main body of the courtroom at one stage in the proceedings in order to better observe the witness giving evidence.

166 *R v Sussex Justices; Ex Parte McCarthy* [1924] 1 KB 256. See also *John Fairfax Pty Ltd v District Court of New South Wales* [2004] NSWCA 324.

All the cases I observed as research for this thesis involved the adduction of CCTV images generally, and several involved issues about the admissibility and use of recognition evidence based on CCTV images specifically. While the issues they raised were clearly not representative of those raised in the vast number of criminal matters heard in NSW courts each year, I nevertheless found the fieldwork to be of great utility to my research. It provided me with a rich source of information about practical matters involving the admission and use of CCTV images which simply could not be investigated in any other way. For example, while the quality of CCTV imagery is often discussed in primary and secondary legal sources, 'images are peculiarly resistant to verbal interpretation'.[167] As such, it is impossible to fully appreciate the great variety in the appearance of CCTV images without actually viewing them in person. Further, anyone who has ever been involved in a criminal proceeding will appreciate that a trial is a social event, and my observations provided me with invaluable insight into how participants in the courtroom engaged with CCTV images in practice. I was able to watch the way in which moving CCTV images were handled—how they were referred to by the stakeholders, the point in time in which they were tendered, how often they were played, paused and rewound, how the events they showed were located and referred to by advocates and witnesses, and the nature of the equipment that was used to display the images.

In addition, my observation research allowed me to investigate the emotional impact of CCTV imagery on the tone and dynamics of criminal proceedings. Again, this is a matter which could not have been adequately investigated through the doctrinal research method alone. In one particularly memorable and poignant moment during my fieldwork, an accused started to sob while watching CCTV footage of his truck crashing into another vehicle at high speed. The trial judge granted an adjournment at this point in the proceedings, but the incident indelibly affected the atmosphere of the proceedings that followed. From that point on, showing regard for the accused's emotional welfare, the prosecutor was at pains to ensure that the footage was not unnecessarily played to its final, shocking

167 *Bento v The Chief Constable* [2012] EWHC 1525.

conclusion, and regularly requested that it be paused or stopped before the point of impact.

Table 1.1

	Case name	**First day of proceedings**	**Courtroom**	**Charge**
1.	*R v Honeysett*	12 June 2014	High Court of Australia, Canberra	Armed robbery (s 97(2) *Crimes Act 1900* (NSW))
2.	*R v Miller; R v Carroll*	10 August 2014	Court 1, Penrith District Court	Break and enter and commit serious indictable offence in circumstances of special aggravation (s112 *Crimes Act 1900* (NSW))
3.	*R v Perks*	17 September 2014	Court 1, Penrith District Court	Dangerous driving causing grievous bodily harm (s52A(iii) *Crimes Act 1900* (NSW)) and other driving offences.
4.	*R v Matia*	27 October 2014	Court 13A, Supreme Court, Queens Square	Manslaughter (s 18(1)(b) *Crimes Act 1900* (NSW))
5.	*R v Gibson*	20 July 2015	Court G4, Downing Centre District Court	Assault with intent to rob while armed with offensive weapon (s 97(1) *Crimes Act 1900* (NSW)).
6.	*R v Rogerson; R v McNamara*	27 July 2015	Court 4, Supreme Court, Darlinghurst	Murder (s 18 *Crimes Act 1900* (NSW))
7.	*R v Tai*	26 March 2016	Court 1, Penrith	Robbery (s 94 *Crimes Act 1900* (NSW)
8.	*R v Sutherland*	17 May 2016	Dubbo District Court	Armed robbery (s 97 *Crimes Act 1900* (NSW))

Thesis structure

Chapter 1 explores the growth of CCTV surveillance systems in Australia over the past twenty-five years and outlines the way images generated by these systems are currently used in police investigations to assist in the identification of offenders in NSW.

Chapter 2 moves the focus of the discussion to the realm of evidence law. It examines one of the cardinal provisions of the *Evidence Act 1995*—namely, the provision that stipulates that evidence must be relevant in order to be admissible. It highlights the difficulties that the application of this rule has posed to the admissibility of recognition evidence based on CCTV images and discusses some of the undesirable practical consequences of excluding this type of evidence on the basis that it is irrelevant.

Following the structure of the Act, **Chapter 3** explores the next potential hurdle to the admissibility of recognition evidence based on CCTV images—the opinion rule. It first discusses the difficulty of classifying recognition evidence as fact or opinion evidence before moving on to analyse the judicial debate about which exception to the opinion rule should be applied to recognition evidence based on CCTV images. It concludes by suggesting an option for reform to resolve the difficulties of interpretation of the provisions when applied to recognition evidence based on CCTV images.

Chapters 4 and 5 address issues relating to the reliability and testability of recognition evidence based on CCTV images and should ideally be read together. **Chapter 4** demonstrates how recognition evidence based on CCTV images is largely unregulated by existing laws, practices and procedures. It notes that this is problematic in light of the many factors that may affect the accuracy of the evidence and make it difficult to weigh and evaluate in practice. **Chapter 5** analyses approaches taken to control this type of evidence in several overseas jurisdictions, and canvasses options for reform that could be implemented in NSW

to address concerns about the potential for recognition evidence based on CCTV images to contribute to miscarriages of justice.

Finally, **Chapter 6** closely examines the increasingly common practice of requiring the fact-finder to compare CCTV images of an offender with the accused in order to determine whether they are the same person. It argues that this task, which requires the fact-finder to attempt to recognise a face with which he or she has very limited familiarity, is complex and fraught with danger. After analysing the factors that may undesirably affect the fact-finder's decision-making process in this respect, it suggests several strategies that could be implemented to attempt to minimise the risk that undertaking the task will contribute to a miscarriage of justice.

2. AN EVIDENTIAL SHIFT: CCTV SURVEILLANCE AND POLICING

> The first thing you do now if there's an incident, a murder or a rape, you seize all the CCTV that you can get.[1]

Introduction

On 15 April 2013, on the north side of Boylston Street, near the finish line of the iconic Boston Marathon, two improvised explosive devices exploded in quick succession.[2] The blasts killed three people and injured 264 others.[3] With no intelligence about a potential terrorist attack in the area and no suspects, authorities were faced with the daunting task of identifying the unknown bomber. In addition to securing the crime scene and analysing physical evidence from the blasts, investigators immediately set about collecting images, including CCTV surveillance footage from over 200 businesses and images taken by spectators at the event. As journalist Patrick J Kiger notes that '[i]n the first 24 hours, the team compiled an astonishing 10 terabytes of data ... roughly enough to fill the hard drives of 10 high-end laptop computers'. In the end, 120,000 still images and close to 13,000 pieces of moving footage were collected.[4] The sheer volume of visual material 'almost became a management problem, there was so much of it'.[5]

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1 Detective Constable, cited in Tom Levesley and Amanda Martin, 'Police Attitudes to and use of CCTV' (2005) Home Office Report 09/05, 5.

2 Massacheusetts Emergency Management Agency et al, *After Action Report for the Response to the 2013 Boston Marathon Bombings* (2014), 4.

3 Ibid.

4 Patrick J Kiger, 'How They Identified The Boston Bombers: A Timeline From Event to Capture', *National Geographic Channel* (online), 1 April 2014 <http://channel.nationalgeographic.com/inside-the-hunt-for-the-boston-bombers/articles/how-they-identified-the-bombers/>.

5 David Montgomery, Sara Horwitz and Marc Fisher, 'Police, Citizens and Technology Factor into Boston Bombing Probe', *The Washington Post* (online), 20 April 2013 <https://www.washingtonpost.com/world/national-security/inside-the-investigation-of-the-boston-marathon-bombing/2013/04/20/19d8c322-a8ff-11e2-b029-8fb7e977ef71_story.html>.

While the investigative team combed through the images, citizens were making their own inquires. Online, 'thousands of amateur sleuths were mimicking the official investigation, inspecting digital images of the crowd on Boylston Street and making their own often wildly irresponsible conclusions about who might be the bombers'.[6] Eventually, investigators discovered a lead—footage of a man who appeared abnormally calm after the first explosion.[7] Further analysis of images containing this man revealed a second suspect. On 18 April, three days after the attack, Special Agent in Charge Richard DesLauriers held a press conference, during which he released still and moving images of the suspects—'black hat' and 'white hat'—and urged the public to help identify them. 'Somebody out there knows these individuals as friends, neighbors, co-workers, or family members of the suspects,' he stated. 'Though it may be difficult, the nation is counting on those with information to come forward.'[8]

The release of the images 'spurred the brothers into action'[9] and, less than six hours later they had killed a policeman, hijacked a car and engaged in a firefight with police. It was during this firefight that one of the suspects, Tamerlan Tsarnaev, was apprehended.[10] His brother, Dzhokhar Tsarnaev, was arrested the next evening. The speed at which events unfolded after the release of the images of the suspects meant that they were ultimately identified other than by

6 Ibid.

7 Patrick J Kiger, 'How They Identified The Boston Bombers: A Timeline From Event to Capture', *National Geographic Channel* (online), 1 April 2014 <http://channel.nationalgeographic.com/inside-the-hunt-for-the-boston-bombers/articles/how-they-identified-the-bombers/>.

8 Federal Bureau of Investigation Boston Division, *Remarks of Special Agent in Charge Richard DesLauriers at Press Conference on Bombing Investigation*, (Press Release, 18 April 2013).

9 David Montgomery, Sara Horwitz and Marc Fisher, 'Police, Citizens and Technology Factor into Boston Bombing Probe', *The Washington Post* (online), 20 April 2013 <https://www.washingtonpost.com/world/national-security/inside-the-investigation-of-the-boston-marathon-bombing/2013/04/20/19d8c322-a8ff-11e2-b029-8fb7e977ef71_story.html>.

10 Tamerlan Tasarnaev later died from injuries sustained as a result of being shot by police and hit by a car driven by his brother: 'Boston Bomber Died of Massive Blunt Trauma from Head to Torso and Gunshots Wounds after his 'Brother Ran Him Over in Shoot-Out', Death Certificate Reveals', *Daily Mail Australia* (online), 4 May 2013 <http://www.dailymail.co.uk/news/article-2319285/Tamerlan-Tsarnaev-Boston-Bombers-cause-death-released-funeral-home-detailing-gruesome-end.html>.

information provided by the public.[11] However, after their images were instantaneously relayed to millions of viewers, there can be little doubt that their identification was a foregone conclusion. A friend posted an image of one of the brothers on his Twitter account,[12] the brothers' aunt telephoned the FBI hotline to identify them,[13] and friends of Dzhokhar Tsarnaev, watching television together, reported being 'stunned to realize one of the wanted men might be Dzhokhar'.[14]

While not related to local events, this high-profile case study provides an excellent example of how 'advanced technology and old-fashioned citizen cooperation'[15] are being used to investigate modern criminal offences. This chapter argues that the increase in recognition evidence in criminal prosecutions in NSW is an inevitable consequence of two separate phenomena, both of which are illustrated by Boston Bombing investigation: (i) the proliferation of CCTV surveillance systems; and (ii) the way CCTV images are used by police and members of the public to investigate criminal activity. To explore these two phenomena, this chapter draws on a diverse range of sources, including the work of surveillance, media and policing scholars, as well as press releases, media reports, government records and legislative materials. The first part of the chapter

11 Fingerprints were taken from the body of one of the suspects, who died after a firefight with police who had responded to a report of a carjacking. After identifying the first suspect, photographs of his brother were matched with the images of the second suspect: Massacheusetts Emergency Management Agency et al, *After Action Report for the Response to the 2013 Boston Marathon Bombings* (2014), 56–57.

12 Patrick J Kiger, 'How They Identified The Boston Bombers: A Timeline From Event to Capture', *National Geographic Channel* (online), 1 April 2014 <http://channel.nationalgeographic.com/inside-the-hunt-for-the-boston-bombers/articles/how-they-identified-the-bombers/>.

13 David Montgomery, Sara Horwitz and Marc Fisher, 'Police, Citizens and Technology Factor into Boston Bombing Probe', *The Washington Post* (online), 20 April 2013 <https://www.washingtonpost.com/world/national-security/inside-the-investigation-of-the-boston-marathon-bombing/2013/04/20/19d8c322-a8ff-11e2-b029-8fb7e977ef71_story.html>; Annette Witheridge, '"My Boys Have Been Smeared by Cheap Lies": Aunt of "Bombers" Protests Their Innocence and Claims THEY are the Victims', *Daily Mail* (online), 22 April 2013 <http://www.dailymail.co.uk/news/article-2312544/Maret-Tsarnaeva-Aunt-Boston-bombers-protests-innocence.html>.

14 '"LOL These People Are Cooked": Boston Bomber's Chilling Tweet Sent Just Hours After the Deadly Attack', *Daily Mail Australia* (online), 28 April 2013 <http://www.dailymail.co.uk/news/article-2315718/Boston-Bomber-Twitter-Dzhokhar-Tsarnaevs-chilling-tweet-sent-just-hours-deadly-attack.html>.

15 David Montgomery, Sara Horwitz and Marc Fisher, 'Police, Citizens and Technology Factor into Boston Bombing Probe', *The Washington Post* (online), 20 April 2013 <https://www.washingtonpost.com/world/national-security/inside-the-investigation-of-the-boston-marathon-bombing/2013/04/20/19d8c322-a8ff-11e2-b029-8fb7e977ef71_story.html>.

traces the rapid and seemingly inexorable expansion of CCTV surveillance systems in the United Kingdom and in Australia in the last quarter of a century, while the second part examines the effective and innovative ways in which police and private citizens are using these images to identify offenders.

The global proliferation of CCTV surveillance

A number of theories seek to explain the increase in CCTV surveillance in the late modern world. For example, the French philosopher, Michel Foucault, has argued that modern surveillance systems are similar to Jeremy Bentham's panopticon.[16] In other words, they are used to establish a disciplinary regime in which the ever-present threat of surveillance by an anonymous viewer forces the object of surveillance to modify his or her behaviour.[17] In addition to the panopticon theory, it has also been argued that the increase in CCTV surveillance is a response to the development of a 'risk society' or a society which is 'organized in relation to fear, risk assessment and the provision of security'.[18] Alternatively, it has been argued that it can be explained by the rapid expansion of the private security industry[19] caused by the 'responsibilisation' of the private sector for crime control.[20]

It is apparent, however, that no one theory can adequately account for the rapid growth of CCTV surveillance today, or for the convergence of different forms of surveillance into 'surveillant assemblages'.[21] It is less challenging, perhaps, to attempt to identify the specific political, social, cultural, legal, geographic and

16 Michel Foucault *Discipline and Punish: The Birth of the Prison* (Second Vintage Books Edition, 1995), 217.

17 Ibid, ch 3.

18 Richard Ericson, 'The Division of Expert Knowledge in Policing and Security' (1994) 45(2) *British Journal of Sociology* 149, 163.

19 Tim Newburn, 'The Commodification of Policing: Security Networks in the Late Modern City' (2001) 38(5–6) *Urban Studies* 829, 839.

20 Other factors may also have contributed to this growth in the private security industry, including the growth of managerialism in policing; the emergence of 'mass private property' or 'quasi-public space'; and the development of 'night-time leisure economies: see Mark Button, 'Private Security and the Policing of Quasi-Public Space' (2003) 31(3) *International Journal of the Sociology of Law* 227, 228; Tim Newburn, 'The Commodification of Policing: Security Networks in the Late Modern City' (2001) 38(5–6) *Urban Studies* 829, 841.

21 Kevin D Haggerty and Richard V Ericson, 'The Surveillant Assemblage' (2000) 51(4) *British Journal of Sociology* 605.

historical factors that have contributed to the growth of CCTV surveillance in various jurisdictions. This section provides a brief overview of the growth of CCTV in the United Kingdom, a jurisdiction widely regarded as having the greatest number of CCTV surveillance cameras in the world. However, as a significant amount of scholarly attention has already been devoted to charting the growth of CCTV surveillance in the United Kingdom, and indeed worldwide,[22] the topic will not be canvassed in great detail in this chapter.

The United Kingdom

In the mid-twentieth century, CCTV technology was deployed in Durham, England, to manage traffic.[23] It wasn't long, however, before the technology was utilised by police for law enforcement purposes.[24] In the 1960s, English police experimented with the use of temporary CCTV surveillance systems to monitor particular locations and events, although initially the systems were very expensive to operate due to the cost of cabling.[25] In 1968, cameras erected to monitor a demonstration in central London were left in place, becoming a fixed surveillance system,[26] and by 1969, 14 different police forces in England were using CCTV surveillance systems (comprising a total of 67 CCTV cameras).[27] The 1970s and 1980s saw CCTV surveillance systems being adopted primarily by the retail sector in England, although 'there was limited diffusion in other sectors, such as

22 For a history of the growth of CCTV surveillance in other European countries, see: Leon Hempel and Eric Töpfer, 'Urban Eye Inception Report' (Working Paper No 1 Centre for Technology and Society Technical University Berlin; Clive Norris, Mike McCahill and David Wood, 'The Growth of CCTV: A Global Perspective on the International Diffusion of Video Surveillance in Publicly Accessible Space' (2004) 2(2/3) *Surveillance & Society* 110. For discussion of the growth of CCTV surveillance in the United States and Canada, see: Clive Norris, 'The Success of Failure: Accounting for the Global Growth of CCTV' in Kirstie; Ball, Kevin D; Haggerty and David Lyon (eds), *Routledge Handbook of Surveillance Studies* (Routledge, 2012) 251; Wade Diesman et al, 'A Report on Camera Surveillance in Canada: Part One' Surveillance Camera Awareness Network.

23 Leon Hempel and Eric Töpfer, 'Urban Eye Inception Report' (Working Paper No 1 Centre for Technology and Society Technical University Berlin, 8.

24 Ibid.

25 Chris A Williams, 'Police Surveillance and the Emergence of CCTV in the 1960s' in Martin Gill (ed), *CCTV* (Perpetuity Press, 2003) 8.

26 Ibid, 15.

27 Ibid, 16.

the London Underground'.[28] In both the public and private sphere in the United Kingdom, the use of CCTV increased markedly in the 1990s[29] in what has been described as 'the era of uptake'.[30]

Among surveillance studies scholars, there is a general consensus that CCTV expansion in England can be attributed to a specific combination of factors: a decline in the cost of the technology, a lack of legal regulation of CCTV surveillance, and a growing political will to invest in crime prevention strategies to alleviate fear of crime.[31] Of these reasons, the third has been deemed the most important. Criminologist Peter Fussey identifies central government funding for CCTV as '*the* central reason determining why ... [Britain's] citizens are subjected to greater levels of CCTV surveillance than those of any other post-industrial liberal democracy'.[32] To a large degree, political willingness to invest in CCTV schemes was triggered by the role of surveillance in the investigation of several high profile offences. The shocking murder of two-year-old James Bulger (whose killers were captured on CCTV with their victim immediately prior to his murder)[33] prompted the then Conservative Government to allocate large amounts of funding for the establishment of open-street CCTV systems in local authority

28 Clive Norris, 'Closed-Circuit Television: A Review of its Development and its Implications for Privacy' in Shlomo Giora; Knepper Shoham, Paul; Kett, Martin (ed), *International Handbook of Criminology* (CRC Press, 2010) 395, 398.

29 Benjamin J Goold, Ian Loader and Angélica Thumala, 'The Banality of Security: The Curious Case of Surveillance Cameras' (2013) 53 *British Journal of Criminology* 977, 980; Dean Wilson, 'Researching CCTV: Security Networks and the Transformation of Public Spaces' (Paper presented at the Australian & New Zealand Critical Criminology Conference, Sydney, 19–20 June 2008), 385.

30 William R Webster, 'The Diffusion, Regulation and Governance of Closed-Circuit Television in the UK' (2004) 2(2/3) *Surveillance & Society* 230.

31 Benjamin J Goold, Ian Loader and Angélica Thumala, 'The Banality of Security: The Curious Case of Surveillance Cameras' (2013) 53 *British Journal of Criminology* 977, 980; Clive Norris, 'Closed-Circuit Television: A Review of its Development and its Implications for Privacy' in Shlomo Giora; Knepper Shoham, Paul; Kett, Martin (ed), *International Handbook of Criminology* (CRC Press, 2010) 395, [14.2].

32 Pete Fussey, 'Beyond Liberty, Beyond Security: The Politics of Public Surveillance' (2008) 3 *British Politics* 120, 131.

33 While James Bulger's killers were not identified because of the CCTV footage, Simon Davies notes that the image of James Bulger with his killers was powerfully symbolic and consolidated in the minds of the public the link between CCTV surveillance and the detection of criminal activity: cited in Benjamin J Goold, Ian Loader and Angélica Thumala, 'The Banality of Security: The Curious Case of Surveillance Cameras' (2013) 53 *British Journal of Criminology* 977, 980; Clive Norris, Mike McCahill and David Wood, 'The Growth of CCTV: A Global Perspective on the International Diffusion of Video Surveillance in Publicly Accessible Space' (2004) 2(2/3) *Surveillance & Society* 110, 111.

areas.[34] Between 1996 and 1999, three quarters of the Home Office's crime prevention budget was spent on CCTV systems.[35] The way the funding was allocated—by virtue of a competition in which applicants were selected after demonstrating that they had established partnerships that could match the funding provided by the central government—stimulated interest in, and demand for, CCTV surveillance systems.[36] Successive governments continued to invest central government money in the establishment of local CCTV systems until CCTV became a significant feature of every government's crime prevention policy.[37] CCTV systems also grew rapidly in the private sector in this time period,[38] leading one commentator to claim that in 1999 the British were the 'most surveilled population in the world'.[39]

Given the extensive use of CCTV cameras by government agencies, businesses and individuals, it is difficult, if not impossible, to accurately determine the actual number of cameras in the United Kingdom today. Oft-quoted estimates include that the UK has more than 4 million CCTV cameras[40] and that that the average citizen in London is photographed up to 300 times a day.[41] These statements have been challenged, however, with later estimates being more modest. In 2009, IMS

34 Clive Norris, Mike McCahill and David Wood, 'The Growth of CCTV: A Global Perspective on the International Diffusion of Video Surveillance in Publicly Accessible Space' (2004) 2(2/3) *Surveillance & Society* 110, 111.

35 Jamie Wilson, 'Street Cameras Defended Despited Limited Effect Claim', *The Guardian* (online), 29 June 2002 <http://www.theguardian.com/uk/2002/jun/29/ukcrime.immigrationpolicy>.

36 Clive Norris, Mike McCahill and David Wood, 'The Growth of CCTV: A Global Perspective on the International Diffusion of Video Surveillance in Publicly Accessible Space' (2004) 2(2/3) *Surveillance & Society* 110, 122.

37 Ibid, 112.

38 Michael McCahill and Clive Norris, *CCTV in Britain*, Urbaneye Working Paper No 3 (2002), 14.

39 Clive Norris and Gary Armstrong, *The Maximum Surveillance Society: The Rise of CCTV* (Berg Publishers, 1999), 39.

40 Conrad Walters, 'There is Nowhere to Hide in Sydney', *The Sydney Morning Herarld* (online), 22 September 2007 <http://www.smh.com.au/news/national/there-is-nowhere-to-hide-in-sydney/2007/09/21/1189881777231.html>; Clive Norris, Mike McCahill and David Wood, 'The Growth of CCTV: A Global Perspective on the International Diffusion of Video Surveillance in Publicly Accessible Space' (2004) 2(2/3) *Surveillance & Society* 110; M McCahill and C Norris, 'Estimating the Extent, Sophistication and Legality of CCTV in London' in Martin Gill (ed), *CCTV* (Perpetuity Press, 2003) 51.

41 Clive Norris and Gary Armstrong, *The Maximum Surveillance Society: The Rise of CCTV* (Berg Publishers, 1999), 67.

Research put the number of cameras at 3.2 million,[42] while Graeme Gerrard, the Association of Chief Police Officers lead on CCTV, estimated that in 2011 there are 1.85 million cameras in the UK, with the average person being observed by a camera approximately 70 times in a day.[43] Regardless of the precise figures, however, it is generally accepted that CCTV surveillance in the UK has become banal.[44] As Benjamin Goold et al note, 'like electricity pylons, telephone poles and water and gas pipes, CCTV cameras have disappeared into the background of urban life and become socially invisible'.[45]

Reasons for the growth of CCTV in NSW

In comparison to the United Kingdom, initial implementation of CCTV systems in Australia was 'modest'.[46] The first open-street CCTV system commenced operation in Perth in 1991[47] and, by the end of 2002, there were 33 CCTV schemes operating in Australia.[48] Since this time, however, the use of CCTV has increased significantly in all states and territories.[49] In 2005, there were 66 CCTV schemes operating in Australia[50] and in 2007, the Australian Security Industry Association estimated that there were between 40,000 and 60,000 CCTV cameras operating in Sydney alone.[51] The following section outlines the social, political, economic and legal factors behind the growth of CCTV surveillance in Australia generally, and NSW in particular.

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42 'Police "Not Using CCTV Properly"', *BBC News* (online), 20 July 2009 <http://news.bbc.co.uk/2/hi/uk/8158942.stm>.'

43 Graeme Gerrard, *CCTV Surveillance,* National Police Chiefs' Council <http://www.npcc.police.uk/ThePoliceChiefsBlog/GraemeGerrardsCCTVblog.aspx>.

44 Benjamin J Goold, Ian Loader and Angélica Thumala, 'The Banality of Security: The Curious Case of Surveillance Cameras' (2013) 53 *British Journal of Criminology* 977.

45 Ibid, 985.

46 Dean Wilson, 'Researching CCTV: Security Networks and the Transformation of Public Spaces' (Paper presented at the Australian & New Zealand Critical Criminology Conference, Sydney, 19–20 June 2008), 386.

47 Ibid.

48 D Wilson and A Sutton, 'Open-Street CCTV in Australia: A Comparative Study of Establishment and Operation ' Criminology Research Council, 11.

49 Dean Wilson, 'Researching CCTV: Security Networks and the Transformation of Public Spaces' (Paper presented at the Australian & New Zealand Critical Criminology Conference, Sydney, 19–20 June 2008) 386.

50 Ibid, 387.

51 Conrad Walters, 'There is Nowhere to Hide in Sydney', *The Sydney Morning Herarld* (online), 22 September 2007 <http://www.smh.com.au/news/national/there-is-nowhere-to-hide-in-sydney/2007/09/21/1189881777231.html>.

Political, public and police support

The rapid increase in the deployment of CCTV systems in Australia can be explained, in part, by the heightened political focus on security in the last decade. Like other nations, Australia's interest in CCTV surveillance was sharpened in the wake of the 2001 terrorist attacks on the World Trade Centre in the United States and the 2005 London bombings.[52] In July 2005, the then Prime Minister of Australia, John Howard, publicly expressed his interest in CCTV surveillance for the identification of offenders, stating that 'the biggest thing that I have learnt by a country mile out of my visit, particularly to Britain, is the extraordinary value of surveillance cameras'.[53]

In September 2005, Mr Howard announced the addition of an extra six million dollars in funding for an existing crime prevention funding program—the National Community Crime Prevention Program (NCCPP). The money was to be spent on security-related infrastructure, including CCTV, to 'enable community organisations to participate in crime prevention and our counter-terrorism response at a local level.'[54] Prior to 2005, no money had been granted under this program for CCTV surveillance systems. However, the third round of funding for this program, which opened in October 2005, saw funding provided for the establishment of at least seven new local government CCTV systems, as well as the expansion and enhanced monitoring of several existing CCTV systems.[55] The fourth and fifth rounds of the NCCPP saw substantial amounts of federal funding being donated to the establishment of new CCTV schemes in every mainland state and territory except the Australian Capital Territory.

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52 Dean Wilson, 'Researching CCTV: Security Networks and the Transformation of Public Spaces' (Paper presented at the Australian & New Zealand Critical Criminology Conference, Sydney, 19–20 June 2008) 385.

53 David Humphries, 'Howard Backs More Security Cameras', *The Sydney Morning Herald* (online), 25 July 2005 <http://www.smh.com.au/news/national/howard-backs-more-security-cameras/2005/07/24/1122143730105.html>.

54 *Australia's Prime Minister Announcement on National Community Crime Prevention Programme*, Voltairenet.org <http://www.voltairenet.org/article128887.html>.

55 Australian Government Attorney-General's Department, *National Community Crime Prevention Programme Projects* <https://www.ag.gov.au/CrimeAndCorruption/CrimePrevention/Pages/NationalCommunityCrimePreventionProgramme.aspx>.

Since the conclusion of the NCCPP in 2008, federal funding for the installation, expansion or enhanced monitoring and use of CCTV systems by local councils, government departments, schools and private interest groups has been provided under various other funding schemes. These include the Safer Suburbs Program (and its included Taxi Security Scheme);[56] the Secure Schools Program (which was later replaced by Schools Security Program); [57] the *Proceeds of Crime Act 2002* (Cth) scheme and the most recently announced scheme, the Safer Streets Program.[58] Robert Carr notes that, since 2004, the Australian Government has granted funding to over 100 local government authorities to establish CCTV systems.[59] The approach of the federal government reflects a strong emphasis on security and risk prevention at a federal level and evidences a clear aim to enlist or 'responsibilise' other bodies in the field of crime prevention.

In addition to federal government funding, CCTV surveillance has been popular at the state government level, with politicians listing CCTV initiatives implemented during terms of office and announcing future plans for CCTV expansion during state election campaigns. In the recent 2014 Victorian state election, for example, the Coalition Government emphasised its track record when it came to installing new CCTV systems in the Melbourne CBD area before announcing a plan to create a new database—Safer Streets Victoria—which would be managed by Victoria Police and would allow investigating officers to more easily identify and access private CCTV footage.[60] In this way, CCTV surveillance has become a

56 Australian Government and Attorney General's Department, *Safer Suburbs Funded Projects* <https://www.ag.gov.au/CrimeAndCorruption/CrimePrevention/Pages/Safersuburbs.aspx >.

57 Australian Government Attorney-General's Department, *Schools Security Programme: Programme Guidelines* (2015–16 to 2017–18).

58 Shann Hulme, Anthony Morgan and Rick Brown, *CCTV Use by Local Government: Findings from a National Survey*, Australian Institute of Criminology Research in Practice No 40 (May 2015), 4.

59 Robert Carr, 'Surveillance Politics and Local Government: A National Survey of Federal Funding for CCTV in Australia' (2014) *Security Journal* 1.

60 Liberal Victoria, 'Napthine Coalition Will Deliver Safer Streets' (Media Release, 15 November 2014).

standard feature of the 'law and order' discourse that has characterised NSW elections since the 1980s[61] and which may also now be seen in other jurisdictions.

In the political context, debates about the use and effectiveness of CCTV are heavily peppered with real-life examples of high profile criminal offences in which CCTV evidence has been useful in the detection of the offender. During debate about the use of CCTV by local councils, for example, several members of parliament pointed to their usefulness in the investigation for the murder of Jill Meagher in Melbourne, Victoria in 2012, as well as in the investigation into the deaths of Thomas Kelly in Kings Cross, NSW in 2012 and Daniel Christie in 2013. In this way, CCTV can be seen as a 'symbolic, populist measure' that reassures the public that the Government is actively tackling crime.[62] Often, political discussion about CCTV surveillance frames the technology in militaristic language, referring to it as a 'weapon' in the 'war against terror'; an approach which may limit public debate about the surveillance, particularly as citizens 'do not enjoy an equal ability [to] challenge the validity of claims made by the State'.[63]

The level of cross-party political support for CCTV surveillance systems in NSW was recently evident in the aftermath of the decision by the Administrative Decision Tribunal (ADT) in *SF v Shoalhaven City Council*.[64] On 2 May 2013, the ADT held that the Shoalhaven City Council's use of a CCTV surveillance system in the Central Business District of Nowra breached a number of provisions of the *Privacy and Personal Information Protection Act 1998* (NSW). The ADT ordered that the Shoalhaven City Council refrain from engaging in any further contravention of an information protection principle or privacy code of practice.

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61 See Russell Hogg and David Brown, *Rethinking Law and Order* (Pluto Press, 1998); Don Weatherburn, *Law and Order in Australia: Rhetoric and Reality* (The Federation Press, 2004).

62 Clive Norris, 'Closed-Circuit Television: A Review of its Development and its Implications for Privacy' in Shlomo Giora; Knepper Shoham, Paul; Kett, Martin (ed), *International Handbook of Criminology* (CRC Press, 2010) 395, 403.

63 Wade Diesman et al, 'A Report on Camera Surveillance in Canada: Part One' Surveillance Camera Awareness Network.

64 *SF v Shoalhaven City Council* [2013] NSWADT 94.

In compliance with this order, the Council immediately switched off 18 CCTV cameras.[65]

The political response to the ADT's decision was swift and strident. The day after it was made, the NSW Premier stated that he was prepared to legislate in order to ensure that CCTV cameras continued to operate in NSW[66] and politicians of all political persuasion voiced their support for CCTV cameras. CCTV surveillance was said to be a 'vital tool in the fight against crime',[67] 'vital in keeping communities safe', 'invaluable in assisting police', and 'a strong deterrent against criminal behaviour'.[68] The decision of the ADT was derided as 'ridiculous' and appalling,[69] and condemned as an attempt to make policy.[70] It was also said to have exposed a 'loophole' in NSW privacy laws.[71] Those opposing the use of CCTV cameras were accused of protecting criminals and endangering the public.[72] On 17 May, a regulation was passed under the *Privacy and Personal Information Protection Act 1998* (NSW) exempting local councils from compliance with the collection and disclosure provisions of the Act when operating CCTV cameras in a public place.[73]

Unsurprisingly, given the degree of political support for CCTV surveillance, the public is also generally supportive of the use of the technology in public spaces in

65 Shoalhaven City Council, *CCTV Cameras Switched Off*, (Media Release, 3 May 2013).

66 Kirsty Needham, 'Premier Backs Council Use of CCTV Cameras', *The Sydney Morning Herald* (online), 4 May 2013 <http://www.smh.com.au/technology/technology-news/premier-backs-council-use-of-cctv-cameras-20130504-2iza3.html>.

67 Ibid.

68 Don Page MP, 'NSW Government Moves to Ensure Continued Use of CCTV' (Media Release, 23 May 2013).

69 New South Wales, *Parliamentary Debates*, Legislative Assembly, 9 May 2013 (Hancock, Shelley).

70 New South Wales, *Parliamentary Debates*, Legislative Assembly 7 May 2013 (Barry O'Farrell).

71 Ibid; New South Wales, *Parliamentary Debates*, Legislative Assembly, 9 May 2013 (Hancock, Shelley).

72 See, eg, Don Page MP, 'NSW Government Moves to Ensure Continued Use of CCTV' (Media Release, 23 May 2013); Alex Arnold, 'Urgent Review After Council CCTV Shutdown', *The Guardian* (online), 6 May 2013 <http://www.theguardian.com.au/story/1480141/urgent-review-after-council-cctv-shutdown/>.

73 *Privacy and Personal Information Protection Amendment (CCTV) Regulation 2013* (NSW).

Australia.[74] While it is often difficult to accurately gauge public opinion about CCTV surveillance (and academic studies on this issue have produced mixed results), surveys in a number of jurisdictions generally reveal it enjoys a high degree of support (although it must be noted that much depends on the survey design).[75] However, it has been observed that public support for CCTV may be based on inaccurate beliefs about the effectiveness of the technology[76] and can wax and wane,[77] with support sometimes falling after the installation of a CCTV system.[78] Further, and paradoxically, support for CCTV systems is often combined with a significant amount of scepticism in the ability of CCTV surveillance to actually reduce criminal activity.[79]

CCTV systems are also strongly supported by law enforcement officers in NSW. As surveillance studies scholar Clive Norris notes, CCTV surveillance enables police to respond to a 'range of low-level nuisances and disorders' and may also provide compelling evidence in any subsequent prosecution of an offender.[80] While the NSW Police Force does not own, fund or operate any CCTV systems in NSW, many systems have been expanded at the request of the police.[81] Police can also exert considerable pressure on local government authorities to install CCTV

74 Goold et al note that support for CCTV surveillance declines when it is proposed to be used in the workplace or the home: Benjamin J Goold, Ian Loader and Angélica Thumala, 'The Banality of Security: The Curious Case of Surveillance Cameras' (2013) 53 *British Journal of Criminology* 977, 989.

75 Office of the Privacy Commissioner, *Community Attitudes to Privacy 2007* (2007); H Wells, T Allard and P Wilson, 'Crime and CCTV in Australia: Understanding the Relationship' Centre for Applied Psychology and Criminology, 46–47 <http://epublications.bond.edu.au/hss_pubs/70 >.

76 Leon Hempel and Eric Töpfer, 'Urban Eye Inception Report' (Working Paper No 1 Centre for Technology and Society Technical University Berlin; Wade Diesman et al, 'A Report on Camera Surveillance in Canada: Part One' Surveillance Camera Awareness Network.[check this]

77 Martin Gill, Jane Bryan and Jenna Allen, 'Public Perceptions of CCTV in Residential Areas: "It Is Not As Good As We Thought It Would Be"' (2007) 17(4) *International Criminal Justice Review* 304.

78 Ibid.

79 See, eg, H Wells, T Allard and P Wilson, 'Crime and CCTV in Australia: Understanding the Relationship' Centre for Applied Psychology and Criminology, 47 <http://epublications.bond.edu.au/hss_pubs/70 >.

80 Clive Norris, 'Closed-Circuit Television: A Review of its Development and its Implications for Privacy' in Shlomo Giora; Knepper Shoham, Paul; Kett, Martin (ed), *International Handbook of Criminology* (CRC Press, 2010) 395, 403.

81 See, eg, Council of the City of Sydney, *Minutes of Meeting No 1308* (17 April 2000); Garry Harding and David Cornett, *Council of City of Sydney Meeting Item 5—Expansion of the Street Safety Camera Program* (21 August 2006).

systems by, for example, threatening industrial action if cameras are not installed,[82] publicly advocating for more CCTV surveillance, or releasing images of criminal offending to generate public support for CCTV surveillance.[83]

Media support

The media has been a powerful influence when it comes to the expansion of CCTV surveillance systems.[84] CCTV footage of dramatic events (criminal or otherwise) is often shown on broadcast television (and increasingly, streamed on the internet via the websites of the major broadcast television producers). In many high-profile murder cases, CCTV images are used to construct a 'visual obituary' for the deceased, depicting him or her undertaking mundane tasks mere minutes or hours before death, 'in the confident contemplation of un-numbered tomorrows'.[85]

The media's preoccupation with CCTV images, particular images relating to criminal offences, can be attributed in part to their visceral impact on the audience. As Clive Norris and Gary Armstrong note:

> Television is a visual medium. CCTV is a visual medium. They were made for each other. Add one other ingredient, crime, and you have the perfect marriage. A marriage that can blur the distinction between entertainment and news; between documentary and spectacle and between voyeurism and current affairs.[86]

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82 'Police May Strike Unless Byron Gets CCTV and More Cops', *Northern Star* (online), 8 October 2013 <http://www.northernstar.com.au/news/police-consider-strike-action/2044006/>.

83 Robert Carr, 'Surveillance Politics and Local Government: A National Survey of Federal Funding for CCTV in Australia' (2014) *Security Journal* 1, 4.

84 Aaron Doyle, 'An Alternative Current in Surveillance and Control: Broadcasting Surveillance Footage of Crimes' in Kevin D; Ericson Haggerty, Richard V (ed), *The New Politics of Surveillance and Visibility* (University of Toronto Press, 2006) 199.

85 Peter Conrad, 'The All-Seeing Eye that Understands Nothing', *The Observer* (online), 11 December 2000 <https://www.theguardian.com/theobserver/2000/dec/10/featuresreview.review>.

86 Clive Norris and Gary Armstrong, *The Maximum Surveillance Society: The Rise of CCTV* (Berg Publishers, 1999), 67.

The heavy use of CCTV imagery in crime reporting may increase public and political support for CCTV surveillance by increasing public fear of victimisation and perpetuating the belief that CCTV surveillance is effective in preventing crime or identifying offenders.[87] In addition, the discussion in the news media about the expansion or desirability of CCTV surveillance can also influence public opinion and policy.[88] Research into media discussion of CCTV surveillance in Canada, for example, has demonstrated that reporting, which tends to be episodic and framed around particular newsworthy events, privileges the perspectives of law enforcement officers. Further, it promotes the notion that CCTV surveillance helps to prevent crime, and rarely explores any of the concerns associated with the spread of this form of surveillance.[89]

In NSW, media portrayal of crime generally may have an effect on public policy-making about surveillance. Government guidelines about the establishment of public CCTV systems note that a preliminary step in the introduction of a CCTV surveillance scheme is the identification of a 'perception or awareness' of a crime problem that could be addressed by this form of surveillance.[90] The guidelines note that the 'perception or awareness' of the crime problem may arise due to media coverage of criminal activities in an area.[91]

Lack of legal regulation

As noted above, one factor often cited as contributing to the expansion of CCTV systems in the United Kingdom is the lack of legal regulation of this form of surveillance. While it has been suggested that this factor was unique to Britain,[92]

87 Wade Diesman et al, 'A Report on Camera Surveillance in Canada: Part One' Surveillance Camera Awareness Network, 7.

88 Josh Greenberg and Sean Hier, 'CCTV Survveillance and the Poverty of Media Discourse: A Content Analysis of Canadian Newspaper Coverage' (2009) 34(3) *Canadian Journal of Communication* 461, 479.

89 Ibid.

90 New South Wales Government, *NSW Government Policy Statement and Guidelines for the Establishment and Implementation of Closed Circuit Television in Public Places* (2014), 5.

91 Ibid.

92 E Heilmann and M–N Mornet, 'L'impact de la vidéosurveillance sur les désordres urbains, le cas de la Grande-Bretagne' (2001) 46(4) *Les Cahiers de la Sécurité Intérieure*

it is in fact mirrored in NSW. In NSW, surveillance activities are regulated by a number of different pieces of legislation, including legislation relating to the protection of privacy,[93] the use of surveillance and listening devices[94] and the practice of workplace surveillance.[95] However, none of these Acts do much to curtail to expansion of CCTV surveillance systems.

Privacy legislation

The *Privacy and Personal Information Protection Act 1998* (NSW)('PPIPA') is the primary piece of legislation protecting the privacy of individuals in NSW. Its provisions place restrictions on the handling of 'personal information' by NSW public sector agencies.[96] A local government authority (that is, a local council) is included in the definition of a public sector agency.[97] Personal information is defined as 'information or an opinion (including information or an opinion forming part of a database and whether or not recorded in a material form) about an individual whose identity is apparent or can reasonably be ascertained from the information or opinion'.[98] This definition is broad enough to encompass the image of a person captured by a CCTV surveillance camera[99] regardless of whether or not the images are actually recorded or simply streamed in a live format.

Accordingly, the provisions of the Act apply to the use of CCTV surveillance systems by local government authorities. However, they do little to limit the deployment or use of CCTV by local councils. While personal information can only be collected for a lawful purpose,[100] local councils have legislative authority to attempt to achieve the lawful purpose of 'crime prevention', and are thus

197, cited in Séverine Germain, Laurence Dumoulin and Anne-Cécile Douillet, 'A Prosperous "Business": The Success of CCTV through the Eyes of International Literature' (2013) 11(1/2) *Surveillance & Society* 134, 141.

93 *Privacy Act 1988* (Cth); *Privacy and Personal Information Protection Act 1998* (NSW).
94 *Surveillance Devices Act 2004* (Cth); *Surveillance Devices Act 2007* (NSW).
95 *Workplace Surveillance Act 2005* (NSW).
96 *Privacy and Personal Information Protection Act 1998* (NSW) ss 20–21.
97 Ibid, s 4.
98 Ibid, s 4(1).
99 *SF v Shoalhaven City Council* [2013] NSWADT 94, [11].
100 *Privacy and Personal Information Protection Act 1998* (NSW) s 8.

entitled to collect CCTV images.[101] The nature of CCTV surveillance means that the information is collected directly from the individual,[102] as required by the Act,[103] and local councils operating CCTV cameras in public places are exempt from the obligations to ensure that the personal information collected is not excessive and is accurate, up-to-date and complete. [104] In essence, therefore, there is no regulation of the quantity of images a local council can collect via CCTV surveillance, or the quality or 'accuracy' of those images.

The *Privacy Act 1988* (Cth) regulates the handling of personal information by Australian, ACT and Norfolk Island government agencies, as well as some private sector organisations, such as health service providers and larger businesses. It does not regulate the acts or practices of individuals; certain exempt entities, such as small businesses (those with an annual turnover of less than 3 million dollars);[105] or some acts and practices (such as journalistic or political acts or practices).[106] Accordingly, there are few privacy-related impediments on individuals and small businesses wishing to install and operate CCTV systems in NSW.

Workplace Surveillance Laws

The *Workplace Surveillance Act 2005* (NSW) regulates the surveillance of employees by means of surveillance cameras, computer software or tracking devices. It prohibits CCTV surveillance of an employee at work unless he or she has been given adequate notice about the kind and nature of the surveillance.[107] In addition, any cameras deployed for the purpose of monitoring employees must be clearly visible and accompanied by signs that state that surveillance is being conducted in the area,[108] and the surveillance of change rooms and bathrooms is

101 *Local Government Act 1993* (NSW) s 24; *SF v Shoalhaven City Council* [2013] NSWADT 94, [16], [18].
102 *SF v Shoalhaven City Council* [2013] NSWADT 94, [141]–[146].
103 *Privacy and Personal Information Protection Act 1998* (NSW) s 9.
104 *Privacy and Personal Information Protection Regulation 2005* (NSW) cl 9.
105 *Privacy Act 1988* (Cth) ss 6C(1), 6D.
106 Ibid, ss 7B(4) and 7C respectively.
107 *Workplace Surveillance Act 2005* (NSW) s 10.
108 Ibid, s 11.

prohibited.[109]The Act does not restrict an employer's ability to conduct CCTV surveillance of his or her employees if the employee has been properly notified of the surveillance. However, as John McAteer, the former NSW Acting Privacy Commission has noted, 'employees are not generally in a position to argue against the introduction of surveillance'.[110]

Surveillance Devices Act 2007 (NSW)

The *Surveillance Devices Act 2007* (NSW) regulates the use of a number of surveillance devices, including optical surveillance and listening devices. An optical surveillance device is a device with the ability to visually record or observe an activity, while a listening device is a device 'capable of being used to overhear, record, monitor or listen to a conversation or words spoken to or by any person in conversation'.[111] A CCTV surveillance camera will always be an optical surveillance device, and may also fall within the definition of a listening device depending on whether it records sound.

The *Surveillance Devices Act 2007* makes it an offence to install or use an optical surveillance device in a building or vehicle if to do so requires entry onto a premises or into a vehicle without the consent of its owner or occupier or involves interference with the vehicle without the consent of the person in its lawful possession or control.[112] Accordingly, the Act does little to control the deployment of public or private CCTV camera systems that do not record sound. The Act also makes it an offence, however, to install, use or maintain a listening device to 'overhear, record, monitor or listen to a private conversation to which the person is not a party', or to record a private conversation to which the person *is* a party, without a warrant or other legal authorisation.[113] This provision does provide some restrictions on the deployment of CCTV systems with the capacity

109 Ibid, s 16.
110 John McAteer, *Submission on the Workplace Surveillance Act 2005 (NSW)* (Office of the NSW Privacy Commissioner, 2010), 2.
111 *Surveillance Devices Act 2007* (NSW) s 4.
112 Ibid, s 8.
113 Ibid, s 7(1). Note that there are some exceptions to this offence provision: Ibid, s 7(2)–(4).

to record sound and explains why most CCTV recordings are silent. There are some relevant exceptions to the provision, such as an exception to a listening device integrated into a Taser issued to a member of NSW Police Force,[114] and a listening device incorporated into body-worn video used by a member of the NSW Police Force.[115]

Criminal and other laws

Criminal laws in NSW restrict the ability of individuals to film others (including by way of CCTV surveillance) in limited circumstances. For example, Part 15B of the *Crimes Act 1900* (NSW) sets out a number of voyeurism offences which prohibit the filming of a person engaged in a private act, or the filming of a person's private parts, if the filming is for the purpose of sexual gratification.[116] A person who establishes a CCTV surveillance system for the purpose of watching another person or another person's residence may also be committing the offence of stalking.[117]

Other laws may operate to curtail the ability of individuals to install and operate CCTV systems. For example, the tort of nuisance may prevent an individual from operating a CCTV camera that observes or records the activities of his or her neighbour[118] while an action in equity for breach of confidence may prevent the release of CCTV footage where it relates to private activities and was disclosed in circumstances importing and obligation of confidence.[119] However, these rights of action are difficult and expensive to enforce and do not represent effective means by which to regulate the operation of CCTV surveillance systems.

114 Ibid, s 7(2)(f).
115 Ibid, s 7(2)(g), s 50A.
116 *Crimes Act 1900* (NSW) ss 91K, 91L.
117 *Crimes (Domestic and Personal Violence) Act 2007* (NSW) ss 8, 13.
118 See, eg, *Raciti v Hughes* (1997) 7 BRP 97. In this case, the plaintiffs were granted an interlocutory injunction to prevent their neighbours from operating floodlights and surveillance equipment in order to observe and record activity in their backyard.
119 See, eg, *Giller v Procopets* (2008) 40 Fam LR 378.

Other relevant factors

A number of other local factors have driven the growth of CCTV surveillance in NSW. In a number of areas, legislation mandates the use of CCTV surveillance systems in an attempt to address criminal behaviour. For example, regulations require certain licensed premises in the Kings Cross and Sydney CBD Entertainment Precincts to maintain CCTV systems, keep recordings from these systems for 30 days, and provide the recordings to police upon request.[120] These licence conditions have been imposed as part of a package of measures designed to reduce alcohol-related violence and anti-social behaviour in popular nightspots in Sydney. In addition, taxi cabs in NSW, and buses operating in certain geographic locations, must be fitted with security camera systems.[121]

A desire to minimise risks and maximise profits in certain industries has also led to the expansion of CCTV surveillance. For example, some insurance companies in Australia sell dashboard cameras to managers of fleets of heavy motor vehicles. These cameras are said to enable fleet managers to identify risky driving behaviour among drivers. Once identified, the behaviour can be addressed through training, thereby reducing 'collision-related costs and fuel consumption.'[122] The cameras are also said to reduce insurance-related costs by reducing premiums, clearly proving who was at fault in an accident (thereby obviating the need for litigation or compromise in an insurance dispute), and encouraging drivers to drive more cautiously.[123] One insurance company claims that witnesses to a collision often 'side against' truck drivers, and that its camera system 'provides objective evidence in these situations of what actually happened inside and in

120 *Liquor Regulation 2008* (NSW) reg 53H; Liquor and Gaming NSW, *Plan of Management for the Sydney CBD Entertainment Precinct* <https://www.liquorandgaming.justice.nsw.gov.au/Pages/liquor/law-and-policy/precincts/sydney-cbd-precinct.aspx>. See the exemptions granted to Sydney CBD Entertainment Precinct special conditions under clause 53ZI of the *Liquor Regulation 2008* (NSW).

121 *Passenger Transport Regulation 2007* (NSW) cll 82, 114. The geographic areas for buses are Metropolitan, Newcastle or Wollongong transport district.

122 Lumley Insurance, *Managing Driver Behaviour Using Camera Technology* (Risk Awareness Guide).

123 See, eg, JanusCam, *Testimonials* <http://www.januscam.com/index.php/testimonials>.

front of the vehicle.'[124] Other suppliers of dashboard camera technologies for vehicles market the technology as protecting the vehicle against theft, robbery or vandalism, and as providing evidence in the case of an accident, robbery or road rage incident.[125]

The local insurance industry has also been influential in the growth of CCTV surveillance in other ways, with many large insurance providers acting as suppliers of CCTV systems[126] and offering discounts to customers who wish to purchase these systems (and presumably reduced premiums).[127] Insurance companies also consider the presence and capabilities of CCTV systems when setting insurance premiums for shopping centres, as CCTV surveillance can assist to prevent fraudulent public liability claims.[128]

The exposition of wrongdoing in certain industries has also contributed to the growth of CCTV surveillance. For example, in 2012, animal welfare activists released footage of the gross mistreatment of cows, goats, pigs and sheep at an abattoir in Western Sydney, leading to calls from the NSW Greens for CCTV surveillance systems to be installed in all abattoirs in NSW.[129] In 2013, more activist footage emerged showing the gross mistreatment of turkeys at a poultry processing plant in Tahmoor in NSW.[130] While the attempt to introduce legislation to mandate the CCTV surveillance of abattoir operations was unsuccessful, a number of meat processing companies elected to install CCTV

124 Lumley Insurance, *Managing Driver Behaviour Using Camera Technology* (Risk Awareness Guide).

125 Windshield Cam, <http://www.windshieldcam.com/>.

126 *CCTV Security System*, RAA <http://www.raa.com.au/insurance-and-security/home-security/cctv-security-systems>.

127 NRMA Insurance, *Business CCTV Surveillance* <http://www.nrma.com.au/security-monitoring/business-cctv-surveillance>; NRMA Insurance, *Home CCTV Surveillance* <http://www.nrma.com.au/security-monitoring/home-cctv-surveillance >.

128 Milton Cockburn, The Shopping Centre Council of Australia, 'Industry Comment' (2011) *Shopping Centre News* 34.

129 The Greens New South Wales, *Greens Launch Bill for Mandatory CCTV in Abattoirs* <http://nsw.greens.org.au/news/nsw/greens-launch-bill-mandatory-cctv-abattoirs>.

130 Michael Vincent, 'Video Shows Poultry Cruelty', *Lateline*, 20 March 2013 <http://www.abc.net.au/lateline/content/2013/s3720275.htm>.

surveillance systems in their slaughterhouses in an attempt to alleviate public concern about animal cruelty. [131]

Images and investigations

The above discussion has outlined how and why CCTV surveillance systems have expanded in NSW in recent years. The second part of this chapter examines the ability of images obtained from these systems to assist in the detection, identification and apprehension of offenders. It begins by examining the involvement of law enforcement officers in the design of public and private CCTV systems, noting that this can result in higher quality (and therefore more useful) images for use in criminal investigations. It then examines the policies and procedures governing police acquisition of public and private CCTV footage, arguing that it is becoming standard practice for police to attempt to locate CCTV images of suspects when investigating offences. Finally, it examines the way CCTV footage that has been acquired by law enforcement officers or private citizens can be used to gather intelligence about identity, either by dissemination in the traditional media or new media (including social media).

CCTV system establishment

Unlike the situation in other overseas jurisdictions (such as the United States), public CCTV systems in NSW are not owned and operated by law enforcement agencies. Instead, they fall within the purview of local government and public transport authorities, which are ultimately responsible for designing, funding, installing, maintaining and operating the systems. Despite this, law enforcement agencies are often closely involved in the establishment and management of public CCTV systems. Prior to the establishment of a CCTV surveillance system, police often provide local government authorities with data about crime trends, patterns, causes and hot spots in the local area. In addition, they may: (i) provide

131 Animals Australia, *Inghams puts in CCTV to Combat Cruelty* <http://animalsaustralia.org/media/in_the_news.php?article=4197>; Mehreen Faruqi, *CCTV in Abattoirs* The Greens New South Wales <http://www.mehreenfaruqi.org.au/cctv/>.iuiu

advice about the nature and quality of images needed for investigative and legal purposes;[132] (ii) help to train personnel hired to monitor a CCTV camera or cameras; [133] and (iii) assist in the evaluation of CCTV systems. [134] In this way, NSW police act as 'knowledge brokers'[135] in the public CCTV arena, using their expertise in crime detection and prevention in a particular geographic area to provide advice about the most effective way to design and operate a particular CCTV system.

A number of the manuals and guidelines that have been published in Australia about CCTV surveillance emphasise the importance of police involvement in the planning for, and design of, any CCTV system. [136] The *NSW Government Policy Statement and Guidelines for the Establishment and Implementation of Closed Circuit Television (CCTV) in Public Places*[137] provides advice to local government and transport authorities that are considering establishing CCTV systems in public places, such as reserves, swimming pools or roads.[138] The guidelines note that that police are key players in the establishment and operation of any public CCTV surveillance system, stating as follows:

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132 See, eg, Garner Clancey, 'Considerations for Establishing a Public Space CCTV Network' Resource Manual No 8, Australian Institute of Criminology, 6.

133 New South Wales Police Force, *NSW Police Force Policy on the Development and Use of CCTV* <http://www.police.nsw.gov.au/about_us/policies__and__procedures/policies/nsw_police_policy_on_the_development_and_use_of_cctv >; New South Wales Government, *NSW Government Policy Statement and Guidelines for the Establishment and Implementation of Closed Circuit Television in Public Places* (2014), 13.

134 New South Wales Police Force, *NSW Police Force Policy on the Development and Use of CCTV* <http://www.police.nsw.gov.au/about_us/policies__and__procedures/policies/nsw_police_policy_on_the_development_and_use_of_cctv >; New South Wales Government, *NSW Government Policy Statement and Guidelines for the Establishment and Implementation of Closed Circuit Television in Public Places* (2014), 13.

135 Richard Ericson, 'The Division of Expert Knowledge in Policing and Security' (1994) 45(2) *British Journal of Sociology* 149, 151.

136 See, eg, Garner Clancey, 'Considerations for Establishing a Public Space CCTV Network' Resource Manual No 8, Australian Institute of Criminology; New South Wales Government, *NSW Government Policy Statement and Guidelines for the Establishment and Implementation of Closed Circuit Television in Public Places* (2014); Victorian Government, *Guide to Developing CCTV for Public Safety in Victoria* (2011); Transport and Infrastructure Senior Officials Committee, *National Code of Practice for CCTV Systems for Mass Passenger Transport for Counter-Terrorism* (2012).

137 New South Wales Government, *NSW Government Policy Statement and Guidelines for the Establishment and Implementation of Closed Circuit Television in Public Places* (2014).

138 Ibid. The term 'public place' is defined in the *Local Government Act 1993* (NSW) s 3, Dictionary.

> While the NSW Police Service should not fund or operate public area CCTV schemes, it should be closely involved in the assessment and planning phase, including risk analysis and evaluation.[139]

The guidelines recommend that a community safety committee be established prior to the implementation of any CCTV scheme and that the committee include a representative from the relevant local policing unit (or Local Area Command).[140] While the guidelines are not mandatory, the fact that the NSW Police Force has stated that compliance with them is a necessary pre-requisite to police involvement in any public CCTV scheme[141] means that local government and transport authorities are likely to attempt to adhere to them.

Unsurprisingly, the NSW Government's guidelines are congruent with the *NSW Police Force Policy on the Development and Use of CCTV*. This policy reiterates that police will not fund, operate or regularly monitor any CCTV system. However, it states that police officers are willing to be involved in the planning phase prior to the deployment of a CCTV system, including to assist in 'initial research, risk analysis, setting objectives, camera placement and operational issues'.[142]

In addition to requesting advice from local police, owners of both public and private CCTV systems in NSW can obtain further assistance from the *Australia and New Zealand Police Recommendations for CCTV Systems*. This publication focuses on the technical features that make CCTV systems useful for law enforcement purposes and includes advice on matters such as the installation and

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139 New South Wales Government, *NSW Government Policy Statement and Guidelines for the Establishment and Implementation of Closed Circuit Television in Public Places* (2014).

140 Ibid, [1.3].

141 New South Wales Police Force, *NSW Police Force Policy on the Development and Use of CCTV* <http://www.police.nsw.gov.au/about_us/policies__and__procedures/policies/nsw_police_policy_on_the_development_and_use_of_cctv >.

142 Ibid.

location of CCTV cameras, image resolution, frame rates and playback software.[143]

The involvement of law enforcement officers in the design, installation and monitoring of public CCTV systems (and the published advice provided by law enforcement officers to private organisations about these matters) helps to ensure that CCTV systems in NSW capture images that are of sufficient quality to be useful in investigations and contributes to the likelihood that the images will later be adduced in evidence in criminal proceedings.

Police and CCTV image acquisition

Whether or not CCTV images of offenders are acquired by police officers depends to some extent on the CCTV system's mode of monitoring. Some CCTV systems are actively monitored—that is, their screens are watched in real-time by control room staff, who can contact local police officers about any suspicious or criminal behaviour that they observe. Many of these public CCTV systems are designed to enable local police officers who have been notified of suspicious or criminal behaviour to access live CCTV images through a designated monitor housed at a local police station.[144] In future police officers may be able to view live CCTV footage on hand held electronic devices such as tablet or smartphone.[145]

When CCTV systems are actively monitored, there is the possibility that police can view and obtain relevant footage easily. However, this may not be the case for all offences. The codes of practice and standard operating procedures that have been devised by local government authorities contain different rules about which

143 Australia New Zealand Policing Advisory Agency and National Institute of Forensic Science, *Australia and New Zealand Police Recommendations for CCTV Systems* (2014).

144 For eg, the Nowra and Wagga Wagga CCTV systems.

145 Renai LeMay, 'QLD Police Get Remote CCTV Access on iPads', *Delimiter* (online), 14 March 2014 <http://delimiter.com.au/2014/03/14/qld-police-get-remote-cctv-access-ipads/>.'

offences will be reported to police officers.[146] For example, the Code of Practice for the City of Sydney Street Safety Camera Program, which covers the heavily populated areas of Kings Cross, Surry Hills, the Sydney CBD, Glebe and Woolloomooloo, states that the primary purpose of the surveillance scheme is to prevent crimes against the person (and lists specific crimes to be targeted by the system, such as armed robbery and sexual assault offences).[147] Its secondary purpose is to prevent serious property crime, such as break and enter offences.[148] It is not, however, designed to detect less serious offences, such as 'minor acts of graffiti and public urination'.[149] As such, these offences may not be reported to police if captured by CCTV cameras. In contrast, other local government authority codes of practice do not distinguish between minor and more serious offending, stating only that police will be notified about, for example, the 'circumstances of any criminal event'.[150]

In most cases, however, public CCTV systems in NSW are passively monitored, so that images are only located and viewed after a criminal offence or other incident of interest has occurred.[151] As noted above, police in NSW work closely with local government and transport authorities when it comes to the installation and operation of public CCTV systems. For this reason, they possess intimate knowledge about the location of most public CCTV cameras. Accordingly, when investigating an offence, police officers are able to request public CCTV footage from the relevant local government or transport authority that may provide relevant evidence.[152]

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146 In NSW, owners of public CCTV systems are required to establish codes of practice and standard operating procedures for the surveillance scheme: New South Wales Government, *NSW Government Policy Statement and Guidelines for the Establishment and Implementation of Closed Circuit Television in Public Places* (2014), 5.

147 City of Sydney, *Street Safety Camera Program Code of Practice* (Reviewed 13 July 2014), [5.1.1].

148 Ibid, [5.2.1].

149 Ibid, [5.7.1].

150 Liverpool City Council, *Public Safety Closed Circuit Television (CCTV) Code of Practice* (2014), [4.7.1]; Penrith City Council, *Public Spaces Closed Circuit Television (CCTV) Program Code of Practice* (2010), [4.6.1].

151 Rachel Marie Johnston, *Police Use of Public Overt Surveillance Technology* (PhD Thesis, University of Illinois, 2012), 6.

152 Codes of Practice and Standard Operating Procedures specify the manner and form of a request by police for CCTV footage. For example, the City of Sydney Street Safety Program Code of Practice requires a NSW Police Responsible Officer to complete a form

While the location of public CCTV cameras is generally known to law enforcement officers in NSW, the same is not true for privately owned CCTV cameras. It can be both difficult and time-consuming for police officers to determine whether or not evidence relating to an offence has been captured on a privately-owned CCTV system located in or around retail, commercial or residential premises.[153] For this reason, the NSW Police Force maintains the 'CCTV Register', a secure database which aims to record the location of 'as many CCTV systems as possible across NSW'.[154] Launched in 2008, the initiative enables business owners who utilise CCTV surveillance to voluntarily register the details of their CCTV system; including the contact details of the owner and operator of their system, the number of cameras in the system and the period of time for which recorded material is stored.[155] While the NSW Police Force has stated that this initiative has 'received widespread support from both government and the business sector',[156] there is no publicly available information about how many private CCTV systems are registered with the CCTV Register or how useful the register is for police investigations.

In addition to knowing where CCTV cameras are located, police must be willing to attempt to acquire relevant footage of an offender. As discussed in Chapter 1, CCTV images are often of great importance in criminal investigations. Nevertheless, there are factors that may militate against the routine collection of CCTV images by police officers, particularly when less serious offences are being investigated. For example, police may find it difficult to locate and access footage held by private organisations or individuals; extraction and storage of the images may be so complicated as to require specialised hardware or expert technical

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requesting access to recorded material. If the request is approved by a City of Sydney Responsible Officer, control room staff are informed and are responsible for organising the viewing or collection of the material by the police: City of Sydney, *Street Safety Camera Program Code of Practice* (Reviewed 13 July 2014), [17.3.3]. Note, slightly different procedures exist for emergency situations: Ibid, [17.6].

153 New South Wales Police Force, *Help Capture A Criminal: CCTV Register* (Brochure).

154 Ibid.

155 New South Wales Police Force, *CCTV Registration Form*.

156 Cabramatta Local Area Command, New South Wales Police Force, 'Facebook Post' (10 October 2011).

knowledge and assistance;[157] review of the footage, particularly when it has been acquired from multiple sources, can be extremely time-consuming;[158] and law enforcement officers may be reluctant to acquire the footage if there has been police misconduct[159] or if police officers fear that the events depicted on the images may be misinterpreted as showing them engaging in undesirable or unlawful behaviour.[160]

There are, however, indications to suggest that attempts to acquire relevant CCTV footage will become standard practice in most criminal investigations in the future. First, victims of crime, regardless of its nature, often feel that police should attempt to locate CCTV surveillance images relating to the offence, despite the fact that this may represent a disproportionate use of finite police resources.[161] This may encourage police to seek out CCTV images in an effort to avoid complaints about the quality of a police investigation and maintain higher levels of satisfaction with police services. Second, the failure of police officers to attempt to locate relevant CCTV evidence in particular cases, or more generally over time, can attract adverse media attention.[162] Third, while police officers do

157 See, eg,Gary Palmer, 'Presenting CCTV Evidence in Court: A Case Study', *Security Solutions* (online), 3 May 2012 <http://www.securitysolutionsmagazine.biz/2012/05/03/presenting-cctv-evidence-in-court-a-case-study/>; Tom Levesley and Amanda Martin, 'Police Attitudes to and use of CCTV' (2005) Home Office Report 09/05, 7.

158 Rachel Marie Johnston, *Police Use of Public Overt Surveillance Technology* (PhD Thesis, University of Illinois, 2012), 152; Tom Levesley and Amanda Martin, 'Police Attitudes to and use of CCTV' (2005) Home Office Report 09/05, 7.

159 Clive Norris and Gary Armstrong, *The Maximum Surveillance Society: The Rise of CCTV* (Berg Publishers, 1999), 190.

160 See, eg, Benjamin J Goold, 'Public Area Surveillance and Police Work: The Impact of CCTV on Police Behaviour and Autonomy' (2003) 1(2) *Surveillance & Society* 191.

161 Rachel Marie Johnston, *Police Use of Public Overt Surveillance Technology* (PhD Thesis, University of Illinois, 2012), 152.

162 See, eg, James Fielding, 'Alice Gross Police Turned Their Backs on Vital CCTV Images', *Express* (online), 28 September 2016 <http://www.express.co.uk/news/uk/516095/Alice-Gross-CCTV-images-police-initially-refused-watch >; Martin Evans, 'Police are Failing to Recover Crucial CCTV Footage, New Figures Suggest', *The Telegraph* (online), 12 December 2013 <http://www.telegraph.co.uk/news/uknews/crime/10512087/10484338Police-are-failing-to-recover-crucial-CCTV-footage-new-figures-suggest.html>; Kiran Randhawa, 'Met Failed to Check CCTV Footage on 118,000 Crimes', *Evening Standard* (online), 11 December 2013 <http://www.standard.co.uk/news/london/met-failed-to-check-cctv-footage-on-118000-crimes-8997560.html>.

not face any civil liability for negligent investigations in NSW,[163] a failure to acquire relevant CCTV footage may be highlighted by defence lawyers seeking to obtain a forensic advantage in a later prosecution.

Fourth, technological developments may soon be implemented to reduce the time and effort taken to collect CCTV images of criminal offences. In England, for example, the 'Facewatch' system enables retailers to upload witness statements and CCTV clips of thefts to a central database that can be accessed by other users and police officers.[164] In addition, if a victim uses the 'Personal Theft Reporting App' on a mobile device to report a theft that may have been captured on a private CCTV system, the owner of the system will receive an automatic email from police encouraging him or her to upload the CCTV images onto Facewatch.[165]

Finally, official codes of practice and operating procedures in Australia may be redrafted so as to highlight the need for police to consider obtaining CCTV evidence during their investigations. In the United Kingdom, for example, the *Primary Investigation of Crime Standard Operating Procedures* require police officers to enquire whether CCTV cameras may have recorded information pertaining to a crime and to view any CCTV footage immediately at the scene of the crime. In its discussion on CCTV footage it states: 'if in any doubt – take it'.[166] In New South Wales, the NSW Police Handbook instructs police officers to enquire about the availability of CCTV footage when handling a stolen vehicle report and to arrange for the collection of any such footage.[167] In addition, the NSW Police Force form for reporting a failure to pay for fuel at a petrol station requires station attendants to note if there is any relevant CCTV footage and

163 *Sullivan v Moody* [2001] HCA 59; *Tame v New South Wales* [2002] HCA 35; *McMaster v New South Wales* (2013) 17 DCLR 250; Jennifer Yule, 'Negligent Investigation by Police: Can a Duty of Care be Found using the Existing Negligence Principles in Australia ?' (2008) 1 *Journal of Australasian Law Teachers Association* 379.

164 'Online CCTV System Goes Nationwide After Slashing Thefts in City', *Evening Standard* (online), 23 September 2011 <http://www.standard.co.uk/news/online-cctv-system-goes-nationwide-after-slashing-thefts-in-city-6446660.html>.

165 Facewatch, *Facewatch to Launch Public App for Reporting Personal Theft* <https://www.facewatch.co.uk/cms/news/facewatch-to-launch-public-app-for-reporting-personal-theft-06-14>.

166 Metropolitan Police Service, *Standard Operating Procedure (SOP) for the Primary Investigation of Crime* (2010), 13.

167 New South Wales Police Force, *NSW Police Force Handbook* (2016), 414.

whether this footage has been transferred to a disc for later police retrieval.[168] While there are not yet broader exhortations in publicly available policing guidelines in NSW about the need for police to acquire CCTV images, it is possible that this will change in future revisions of the material.

The rise of recognition evidence

When CCTV surveillance systems capture an image of an unknown offender, it is necessary for police or anyone else investigating the offence to attempt to identify the person. This section discusses the distribution of CCTV images of an offender for the purposes of gathering information about the offender's identity. It begins by examining the dissemination of images by police in NSW, before moving on to consider the new phenomenon of 'crowd sourced policing'. Ultimately, this section argues that new modes of digital communication and methods of information-gathering will result in an increase in the amount of recognition evidence adduced in criminal prosecutions.

Police appeals for assistance and the traditional media

The act of policing relies heavily upon community engagement and support. Police officers rely on members of the public to report crime[169] and volunteer information about criminal activity. As Martin Innes notes, one of the most significant factors in determining whether a crime will be solved is the nature and extent of the information provided to the police by members of the public.[170] Policing organisations have established a number of different methods to facilitate the provision of information from members of the public, such as canvassing local residences for witnesses, establishing telephone hotlines and creating online forms that enable information to be submitted to the police via the internet.

168 New South Wales Police Force, *Drive Off/Fail to Pay for Fuel*.

169 The Right Honourable Lord Justice Leveson, *An Inquiry into the Culture, Practices and Ethics of the Press* (The Stationary Office, November 2012) vol 1, 20.

170 Martin Innes, 'The Media as an Investigative Resource in Murder Enquiries' (1999) 39(2) *British Journal of Criminology* 269, 271.

However, the police are not always best placed to communicate widely with the public or to effectively harness public support for their investigations. For this reason, policing organisations have historically relied on the traditional media (mass circulation print media, broadcast television and radio) to disseminate public appeals for assistance and to encourage members of the public to come forward with evidence.[171] In NSW, a key objective of the NSW Police Force's Public Affairs Branch is to 'maximise assistance and information from the public to help solve crime'[172] and the NSW Police Force Media Policy reminds police officers that media attention 'is an opportunity we can use to help achieve our goals'.[173]

As part of a request for assistance or an appeal for witnesses, policing organisations often release CCTV images which depict a suspect. Although these images are released for the ostensible purpose of seeking information about the suspect's identity from members of the public, there may be other subsidiary purposes for the release of the images. These include securing public support and hence internal resources for an investigation,[174] encouraging offenders to turn themselves in to the police (or behave in a manner such as to attract the suspicion of others who then turn them in to the police), avoiding criticism about the level of investigative effort put in to solving an offence, and promoting public safety. [175]

In NSW, a photographic image of an unknown offender is first circulated internally to members of the NSW Police Force. If this does not generate any leads in an investigation, and there is no other means of identifying the person depicted in the images, the image may be released to the traditional media or

171 Ibid, 275.
172 New South Wales Police Force, *Media Policy* (March 2016), [1.1].
173 Ibid.
174 Martin Innes, 'The Media as an Investigative Resource in Murder Enquiries' (1999) 39(2) *British Journal of Criminology* 269, 273; Anne Hardy and Alistair Gunn, 'Information Provision and Restriction: The Roles of Police, Media and Public in Coverage of the Coral-Ellen Burrows Murder Inquiry' (2007) 13(1) *Pacific Journalism Review* 161, 168.
175 Martin Innes, 'The Media as an Investigative Resource in Murder Enquiries' (1999) 39(2) *British Journal of Criminology* 269, 276. See also Anne Hardy and Alistair Gunn, 'Information Provision and Restriction: The Roles of Police, Media and Public in Coverage of the Coral-Ellen Burrows Murder Inquiry' (2007) 13(1) *Pacific Journalism Review* 161, 169.

posted on social media sites.[176] The release of the images must generally be 'coordinated through the Police Media Unit after endorsement by the Office of the General Counsel and authorisation by the Director, Public Affairs Branch, or the Commissioner or a Deputy Commissioner where appropriate'.[177] In some cases, the police may choose to release moving CCTV images of an offender. If these images show the commission of the crime, the offender's face must be pixelated unless 'all other avenues of investigation have been exhausted' and the release of the images has been approved by the Director of the Public Affairs Branch.[178] Further, CCTV images can only be released to the media if authorisation has been given by the owner of the CCTV surveillance system.[179]

Once released by the police, CCTV images of offenders are often published by the traditional media. Indeed, television programmes that appeal to the public for assistance to solve crimes, such as *Crimewatch UK* and *Crimestoppers* in Australia, rely heavily on this footage for content.[180] The programmes aside, however, the media has long possessed a voracious desire for news about crime.[181] As noted above, stories accompanied by CCTV images generally satisfy a number of the news values that operate to make a crime story 'newsworthy'.[182] They are simple, with the 'hook' being the footage itself, as well as being sufficiently individualised (that is, they focus on the actions and reactions of identifiable individuals). In addition, they often centre on violence—an inherently newsworthy topic—and in doing so highlight the risk of victimisation to the target audience. The presence of visual images of the victim, the offender, or the offence serves to increase the authenticity and immediacy of the story, as well as its dramatic and emotional impact.[183] As criminologist Yvonne Jewkes notes:

176 New South Wales Police Force, *Media Policy* (March 2016), 21.
177 Ibid, 20.
178 Ibid, 23.
179 Ibid, 23–24.
180 Yvonne Jewkes, *Media & Crime* (Sage Publications, 2004), 168.
181 Stanley Cohen has noted that crime first became a hot topic of news in the press in the mid 1800s: P C Cohen, *The Murder of Helen Jewett: The Life and Death of a Prostitute in Nineteenth-Century New York* (New York, 1998), cited in Ian Marsh and Gaynor Melville, *Crime, Justice and the Media* (Routledge, 2nd ed, 2009), 6.
182 For a discussion of 12 news values that inform the crime reporting, see Yvonne Jewkes, *Media & Crime* (Sage Publications, 2004), ch 2.
183 Ibid, 56.

> Combining the mundane ordinariness of everyday life with the grim inevitability of what is about to unfold, CCTV footage – played out by the media on a seemingly endless loop appeals to the voyeuristic elements in all of us, while at the same time reinforcing our sense of horror, revulsion and powerlessness.[184]

In addition, CCTV footage, particularly when accompanied by a press release or distributed as part of a news package prepared by an internal policing media unit, can be attractive to the media for structural reasons. In particular, it can provide fast, convenient content to media organisations with few specialist crime reporters, tight budgets, short deadlines and a great need for new material to satisfy the demands of the 'global, interactive 24–7 news mediasphere'.[185] In Australia, policing organisations now employ former journalists, political advisers and public relations specialists to work in specialised public relations and media units.[186] These in-house multi-media units are often involved in the production of stories for news outlets which are accompanied by visual imagery, such as CCTV images.[187] As legal scholars Murray Lee and Alyce McGovern note, the pre-production of news 'packages', complete with high-quality professional images, increases the probability of a story being run in the traditional and online media outlets.[188]

The release of CCTV images of an offender (or 'video wanted posters')[189] to the traditional media can be a highly successful strategy. Members of the public are often willing to help police identify offenders. As Aaron Doyle notes, in the twentieth century, informing became to be seen as 'an act of good citizenship',

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184 Ibid.

185 Chris Greer and Eugene McLaughlin, 'We Predict a Riot? Public Order Policing, New Media Environments and the Rise of the Citizen Journalist' (2010) 50 *British Journal of Criminology* 1040, 1044; Anne Hardy and Alistair Gunn, 'Information Provision and Restriction: The Roles of Police, Media and Public in Coverage of the Coral-Ellen Burrows Murder Inquiry' (2007) 13(1) *Pacific Journalism Review* 161, 171.

186 Murray Lee and Alyce McGovern, *Policing and Media: Public Relations, Simulations and Communications* (Routledge, 2014), 38.

187 Ibid.

188 Ibid, 108, 111.

189 Aaron Doyle, 'An Alternative Current in Surveillance and Control: Broadcasting Surveillance Footage of Crimes' in Kevin D; Ericson Haggerty, Richard V (ed), *The New Politics of Surveillance and Visibility* (University of Toronto Press, 2006) 199, 204.

and the developing 'culture of informing' was further fuelled by the 9/11 terrorist attacks on the World Trade Centre. [190] Today, Doyle argues that the use of surveillance images in broadcast television has created 'a new type of watching public' and led to surveillance becoming a shared media ritual.[191]

Police appeals for assistance and social media

Policing organisations have had a long, symbiotic and occasionally tense relationship with the traditional media. As noted above, police have historically relied heavily on the mainstream media to disseminate appeals for assistance to the general public. Over the last thirty years, however, the customary framework of interaction between police and the mainstream media has changed.[192] Permanent, professional media liaison units have been established in overseas jurisdictions and in every policing organisation in Australia. Containing members of staff with journalism or media relations backgrounds, these units have engaged in deliberate, proactive and successful campaigns to utilise social media and other online video image distribution platforms to communicate with the public.[193] Policing organisations are now producers of media content which can be shared and accessed across a variety of online platforms. As a result, as Lee and McGovern note, 'police–media–public relationships have become liquid, continually shifting, folding in on themselves—policing, news and popular culture are colliding, feeding off one another, being reproduced and re-presented in [previously unimaginable] ways.'[194]

The NSW Police Force has a strong social media presence. It established its Facebook page in 2010, and in August 2011 it launched 'Project Eyewatch', an

190 Ibid, 202.
191 Ibid, 218.
192 Murray Lee and Alyce McGovern, *Policing and Media: Public Relations, Simulations and Communications* (Routledge, 2014), 114.
193 Ibid, 31, ch 5.
194 Ibid, 61.

initiative designed to put the Neighbourhood Watch program online[195] and enable members of the community to 'participate in active crime prevention activities online in their own homes 24 hours a day, 7 days a week'.[196] Initially, 10 Local Area Commands (LACs) established pages on Facebook pursuant to Project Eyewatch,[197] but the pilot program was such a success that it was soon rolled out state wide.[198] Today, every LAC in NSW has a Facebook page and additional Facebook pages have been established for specialist units within the NSW Police Force, such as the Aviation Support Branch (PolAir) and the Police Dog Unit.[199] Since the launch of its Facebook page in 2010, the NSW Police Force has consistently increased its number of 'fans' or followers each year. At the end of June 2010, it had 4,500 fans on Facebook,[200] while by mid-2015, this number had grown to approximately 488,000 fans.[201]

The NSW Police Force also utilises other social media platforms to communicate with the public, such as the micro-blogging platform Twitter and the video-sharing website, YouTube. Again, the NSW Police Force is popular on these social media sites. It has consistently increased its number of Twitter followers each year since 2009, and as of July 2012 it had 21,451 Twitter followers.[202] Further, in July 2012, videos uploaded by the NSW Police Force onto YouTube had been viewed approximately 1.8 million times.[203]

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195 Rodney Stevens, 'Police Project Eyewatch Wins Award', *Northern Star* (online), 3 August 2012 <http://www.northernstar.com.au/news/eyewatch-wins-award-for-keeping-on-top-of-criminal/1491223/>.

196 NSW Police Force, cited in Murray Lee and Alyce McGovern, *Policing and Media: Public Relations, Simulations and Communications* (Routledge, 2014), 131.

197 New South Wales Police Force, *Police Lauch "Project Eyewatch" Trial—Neighbourhood Watch for the 21st Century Via Facebook* (5 August 2011) <https://www.facebook.com/notes/nsw-police-force/police-launch-project-eyewatch-trial-neighbourhood-watch-for-the-21st-century-vi/10150251851961394>.

198 Rodney Stevens, 'Police Project Eyewatch Wins Award', *Northern Star* (online), 3 August 2012 <http://www.northernstar.com.au/news/eyewatch-wins-award-for-keeping-on-top-of-criminal/1491223/>.

199 New South Wales Police Force, *Eyewatch—Your Link to Local Police* <http://www.police.nsw.gov.au/about_us/structure/operations_command/major_events_and_incidents_group/project_eyewatch>.

200 New South Wales Police Force, *Annual Report 2009–10*, 12.

201 Sonia Roberts, New South Wales Police Force Media Unit, 'Road Policing–Telling It and Selling It–Old Media Versus New Media' (Paper presented at the Australasian Road Safety Conference, Gold Coast, 14–16 October 2015).

202 New South Wales Police Force, *Annual Report 2011–12* 12.

203 Ibid.

As noted above, police in NSW are permitted to post static images of adult offenders on social media sites, provided the images have first been circulated internally to no effect. If the offence being investigated is a summary offence, or a 'Table 2 indictable offence',[204] the images can be released by the relevant LAC without the approval of the Police Media Unit.[205] Again, the publication of moving images on social media sites must be coordinated by the Police Media Unit. Both moving and static images released by police are generally accompanied by a physical and ethnicity based description of the person about whom information is sought.[206] In these cases, it is difficult to determine whether the description has been provided by a witness to the offence or is the result of interpretation of the image by a member of the NSW Police Force. Regardless of the source of the information, however, it is arguable that the description may affect the way the image is 'read' or interpreted by others, particularly in cases where the quality of the image means that certain aspects of it, such as a person's hair colour or ethnicity, are ambiguous.

It is unclear how often appeals for information about the identity of people depicted in CCTV images are successful in NSW. However, members of police forces in a number of jurisdictions around Australia have recounted cases where great leaps in investigations have been made after 'pushing out the CCTV' on social media platforms and appealing for public assistance.[207] Indeed, social media platforms may be more useful to police seeking information from the public than traditional media outlets. They enable police officers to bypass traditional media outlets and communicate directly with the public. In this way, policing organisations can counter some of the most significant problems in the police-media relationship—the failure of the media to disseminate information on behalf of the police (or to disseminate it conditionally on the promise of exclusive

204 A summary offence is an offence that is not an indictable offence. Unless otherwise provided, it is to be dealt with by the Local Court of NSW: *Criminal Procedure Act 1986* (NSW) ss 3, 7. A 'Table 2 indictable offence' is an offence listed in Table 2 of Schedule 1 of the *Criminal Procedure Act 1986* (NSW). An offence listed in this table is to be dealt with summarily unless the prosecutor elects otherwise: Ibid, sch 1, table 2.

205 New South Wales Police Force, *Media Policy* (March 2016), Appendix 1, 55–56.

206 Only certain physical and ethnicity based descriptors can be used: see Ibid., [9.2]–[9.3].

207 Murray Lee and Alyce McGovern, *Policing and Media: Public Relations, Simulations and Communications* (Routledge, 2014), 122–123.

access to additional investigative information)[208] and the tendency of the media to misinterpret or distort the information provided to them by policing organisations[209] by virtue of the content, angle or tone of the story.

In addition, social media platforms provide police with targeted access to a particularly useful subsection of the public—citizens interested in policing or the online experience provided by police to their 'friends' or 'followers'. It is logical to assume that a large number of those who have sufficient interest in the activities of police officers to connect with them in the online environment will also be willing to assist police to identify offenders where possible. The ability of individual LACs to communicate with members of the public who live and work in a particular geographic area may also increase the likelihood that someone will be able and willing to identity an offender if the offender is from the local community. Alternatively, it may provide police with access to additional imagery to use for investigative purposes. In one instance, for example, an appeal from the Blue Mountains LAC for information about the identity of two men at a railway station depot was met with the comment 'Hmm I was going past there around midnight-1am. I will have to look at my dash cam'.[210]

Once images of an offender have been distributed online, they can then be viewed repeatedly and at leisure, as well as shared among users of the same or other social media platforms, so that recognition of an offender occurs as part of a fluid, informal and collective policing effort by members of the public. In contrast to the typically short 'shelf life' of CCTV images of offenders shown in the traditional media, the re-posting of images within and across social media forums helps them to remain active for longer periods of time, a fact which again increases the likelihood that a viewer will recognise an offender in an image distributed via social media.

208 See, eg, Ibid, 100; Martin Innes, 'The Media as an Investigative Resource in Murder Enquiries' (1999) 39(2) *British Journal of Criminology* 269, 280.

209 Rob C Mawby, 'Police Corporate Communications, Crime Reporting and the Shaping of Policing News' (2010) 20(1) *Policing and Society* 124, 131.

210 Blue Mountains Local Area Command, New South Wales Police Force, 'Can You Assist Police with the Identification of this Man?' (1 August 2016, Facebook Comments).

It is apparent from the experience of overseas jurisdictions that using social media to identify offenders is particularly effective when police are investigating large scale social disturbances. For example, approximately 5,000 criminal offences were recorded during the August 2011 'London Riots' in the United Kingdom.[211] In the aftermath of the riots, over 500 police officers and members of staff analysed thousands of hours of CCTV footage, much of which was obtained from privately owned shops, in order to isolate images of offenders.[212] The Greater Manchester police ran a high-profile 'Shop a Looter' campaign, which asked members of the public to help to identify offenders from CCTV images posted on dedicated Flikr and Facebook sites, as well as on mobile advertising vans[213] and large public screens located in the city.[214] Police reported being 'inundated' with information from the public after launching the campaign.[215] With assistance from the public, numerous offenders were identified from CCTV footage, and arrests made as a result of these identifications were often filmed and publicised.[216]

In addition to using existing social media platforms that are already 'embedded in everyday life',[217] police in some overseas jurisdictions are seeking identity information from the public in increasingly novel ways. For example, in 2012 the London Metropolitan Police launched 'Facewatch ID', a smartphone app which enables citizens to enter the postcode and receive CCTV images of unidentified offenders in their local area. Designed to enlist the public to 'assist in the huge job

211 Her Majesty's Inspectorate of Constabulary, 'The Rules of Engagement: A Review of the August 2011 Disorders' (2011), [1.7]. The riots occurred from 6 August to 10 August 2011.

212 Lee Bridges, 'Four Days in August: The UK Riots' (2012) 54(1) *Race & Class* 1, 8.

213 'Englands "Shop a Looter" Campaign Nabs Young Burglar', *Crikey*, 15 August 2011 <https://www.crikey.com.au/2011/08/15/shop-a-looter-uk-riots/ >.

214 'Police Beam Images of Wanted Riot Suspects on to Giant Screens', *The Guardian* (online), 13 August 2011 <https://www.theguardian.com/uk/2011/aug/12/police-wanted-riot-suspects-looter>.

215 'Police Inundanted with Calls to "Shop a Looter" Scheme', *BBC* (online), 13 August 2011 <http://www.bbc.com/news/uk-england-manchester-14515631>.

216 'Englands "Shop a Looter" Campaign Nabs Young Burglar', *Crikey*, 15 August 2011 <https://www.crikey.com.au/2011/08/15/shop-a-looter-uk-riots/ >.

217 Daniel Trottier, 'Police and User-Led Investigations on Social Media' (2014) 23(1) *Journal of Law, Information and Science* 75, 78.

of managing the capitals CCTV image database', the 'app' was responsible for the identification of 29 people during trials conducted over a two-month period.[218]

CCTV and user-led crowd-sourced policing

Social media is not only a useful investigative tool for police officers but provides members of the public with the opportunity to investigate criminal activity. 'User-led crowd-sourced policing' occurs when individuals work together, usually via social media, to undertake traditional policing tasks, such as the identification of suspects[219] or the analysis of events surrounding a criminal offence.[220] This type of citizen policing represents the intersection of crowd-sourcing (the phenomenon where many non-skilled individuals perform the work of a skilled individual for little or no reward) and the 'media culture of crime-based reality shows like Crimewatch and America's Most Wanted, which made appeals to their audiences for personal information about suspects.'[221]

User-led crowd-sourced policing generally relies on the uploading and sharing of images captured by citizens, either via handheld devices with video recording capabilities, such as mobile telephones,[222] or private CCTV systems. The images can be shared in a variety of online settings, including personal social media accounts or dedicated social media sites designed to facilitate the easy sharing of such images.

There is little information about the effectiveness of user-led crowd-sourced policing, although anecdotally it is a method of social surveillance that has proved

218 Metropolitan Police Service, *New Facewatch Phone App Launched to Help Identify Police CCTV Images* (13 June 2014) <https://www.facewatch.co.uk/cms/news/new-facewatch-phone-app-launched-to-help-identify-police-cctv-images-06-14>.

219 Christopher J Schneider and Daniel Trottier, 'The 2011 Vancouver Riot and the Role of Facebook in Crowd-sourced Policing' (2012) 175 *BC Studies* 57, 63.

220 Ibid, 67; Daniel Trottier, *An Inventory and Evaluation of CCTV Internet Crowd-Sourcing*, The Privacy & Security Research Paper Series Issue No 4 (2012).

221 Daniel Trottier, *An Inventory and Evaluation of CCTV Internet Crowd-Sourcing*, The Privacy & Security Research Paper Series Issue No 4 (2012), 4.

222 Christopher J Schneider and Daniel Trottier, 'The 2011 Vancouver Riot and the Role of Facebook in Crowd-sourced Policing' (2012) 175 *BC Studies* 57, 60.

useful in identifying offenders[223] (while simultaneously raising concerns about online vigilantism).[224] For example, in 2015, a BBC radio presenter posted CCTV images of two men breaking into her brother's garage on Twitter and asked her 750,000 followers to help identify them. Within 24 hours, two men had been arrested and charged with the offence.[225] In 2010, private CCTV footage of a UK woman dumping a cat in a bin was uploaded onto YouTube, after which the woman was identified by a user of the website '4chan'. In a local example, CCTV footage of a young boy stealing a British Staffordshire bull terrier, 'Buckie', in Bondi, NSW, led to his identification and the return of the dog.[226] The speed with which user-led crowd-sourced policing activities can occur is demonstrated by the fact that in the 2011 Vancouver riots, suspects whose images had been captured and distributed online by bystanders were identified by other internet users before the conclusion of the riot.[227] As one Canadian police officer noted during the investigation of the riots, 'we have names of suspects before we know exactly what they did and where they did it'.[228] The convergence between user-led crowd-sourced policing and traditional policing was evident in the aftermath of the Vancouver riots, when police officers used facial-recognition software to analyse content uploaded by citizens[229] and asked members of the public to 'tag' offenders in images online to assist the police identifying them.[230]

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223 'Online CCTV System Goes Nationwide After Slashing Thefts in City', *Evening Standard* (online), 23 September 2011 <http://www.standard.co.uk/news/online-cctv-system-goes-nationwide-after-slashing-thefts-in-city-6446660.html>.

224 See, eg, David S Wall, 'Could Crowd-Sourced Policing Turn Us Into Vigilantes—or Bedroom Super Sleuths?', *The Conversation* (online), 18 October 2014 <https://theconversation.com/could-crowd-sourced-policing-turn-us-into-vigilantes-or-bedroom-super-sleuths-33149>.

225 'Sara Cox Helps Convict Brother's Burglars by Posting CCTV on Twitter', *The Telegraph* (online), 19 February 2015 <http://www.telegraph.co.uk/news/uknews/crime/11422171/Sara-Cox-helps-convict-brothers-burglars-by-posting-CCTV-on-Twitter.html>.

226 LOTL Rescue, *Buckie's Back Home Hooray!* (20 October 2012) <https://www.facebook.com/LotlRescue/posts/506014732750318>.

227 Christopher J Schneider and Daniel Trottier, 'The 2011 Vancouver Riot and the Role of Facebook in Crowd-sourced Policing' (2012) 175 *BC Studies* 57, 60.

228 'Vancouver Police Shift Blame for Riot', *CBC News* (online), 20 June 2011 <http://www.cbc.ca/news/canada/british-columbia/vancouver-police-shift-blame-for-riot-1.995380>.

229 Daniel Trottier, *An Inventory and Evaluation of CCTV Internet Crowd-Sourcing*, The Privacy & Security Research Paper Series Issue No 4 (2012) 102.

230 Christopher J Schneider and Daniel Trottier, 'The 2011 Vancouver Riot and the Role of Facebook in Crowd-sourced Policing' (2012) 175 *BC Studies* 57, 64.

Conclusion

Public and private CCTV surveillance is expanding rapidly in numerous countries around the world.[231] In NSW, its growth can be attributed to high levels of political and public support for the technology, positive media representations regarding its utility, and a lack of legal regulation of visual surveillance. As the web of formal visual surveillance expands, more and more offenders are being captured on camera at or around the time of their offending. Once collected, modern communications technology enables a visual representation of an offender to be cropped, rotated and enlarged before being distributed more widely and effectively than has even been possible in the past. Online, images are viewed, analysed, discussed, and shared across a variety of platforms by legions of 'armchair investigators' committed to assisting police in their investigations. As a result of the union between 'advanced technology and old-fashioned citizen cooperation', the traditional sphere of anonymity of many offenders is shrinking. Increasingly, offenders are being recognised by police officers and members of the public. The next chapter examines how this type of evidence—recognition evidence based on CCTV images—is accommodated under the *Evidence Act 1995* (NSW), focusing in particular on the application of the relevance provisions to the evidence.

231 Clive Norris, 'The Success of Failure: Accounting for the Global Growth of CCTV' in Kirstie; Ball, Kevin D; Haggerty and David Lyon (eds), *Routledge Handbook of Surveillance Studies* (Routledge, 2012) 251, 252–253.

3. STUMBLING ON THE THRESHOLD: THE PROBLEM OF RELEVANCE

> 'We are going round and round in some rarefied whirl, and I just do not understand it'.[1]

Introduction

Of all of the modern rules of evidence, the most fundamental, the 'touchstone' to which all evidence must be brought,[2] is the requirement that evidence be relevant.[3] Evidence that is not relevant is not admissible.[4] In the 1800s, renowned evidence law scholar, James Bradley Thayer, argued that the exclusion of irrelevant evidence was so integral to the functioning of the adversarial system of criminal justice that it was 'not so much a rule of evidence as a presupposition involved in the very conception of a rational system of evidence'.[5]

The *Evidence Act 1995* (NSW) maintains the traditional common law position in respect of relevance by making it the 'bedrock requirement of admissibility'.[6] Section 56(1) provides that relevant evidence is admissible (subject to the operation of other provisions of the Act), while s 56(2) explicitly states that irrelevant evidence is inadmissible. Relevant evidence is defined under the Act as evidence that, 'if it were accepted, could rationally affect (directly or indirectly) the assessment of the probability of the existence of a fact in issue in the proceeding'.[7] A fact in issue is an element of the offence, assessed in light of the

1 Transcript of Proceedings, *Smith v The Queen* [2001] HCATrans 214 (25 May 2001) (Gummow J).
2 *Wilson v The Queen* (1970) 123 CLR 334, 337 (Barwick CJ).
3 James Bradley Thayer, *A Preliminary Treatise on Evidence at the Common Law* (Little, Brown, and Company, 1898), 265.
4 Ibid, 264–265.
5 Ibid.
6 Eleanor Swift, 'One Hundred Years of Evidence Law Reform: Thayer's Triumph' (2000) 88(6) *California Law Review* 2437, 2451.
7 *Evidence Act 1995* (NSW) s 55(1).

defence (if known).[8] Behind the facts in issue, however, 'there will often be many issues about facts relevant to the facts in issue'.[9]

The apparent simplicity of the relevance rule is deceptive. It has been judicially noted that the relationship between relevance and admissibility in the law of evidence 'abounds in ambiguities'.[10] Indeed, the relevance of recognition evidence based on CCTV images has proven to be particularly problematic in NSW and other uniform Evidence Act jurisdictions. Despite this, there has been little scholarly analysis or critique of the issue. This chapter aims to remedy this gap in the academic literature and it is divided into three parts. The first part closely analyses the majority judgment in *Smith v The Queen*.[11] It draws on evidence law scholarship, case law and the work of cognitive and social psychologists to highlight several problems with the majority's factual and legal conclusions. The second part of the chapter draws on an analysis of all of the published cases citing or applying *Smith* to argue that the judgment, despite being deeply ingrained in the legal lexicon, is poorly understood by stakeholders in the criminal justice system, with the consequence that potentially relevant and probative evidence is not always being collected by investigators, presented by lawyers, or admitted by judicial officers. The third and final part of the chapter uses case law and courtroom observations to highlight the difficulty of the application of the majority's judgment in *Smith* in practice.

Smith v The Queen

On 26 June 1997, at approximately 12.30pm, four men entered the Caringbah branch of the National Australia Bank. One jumped over the counter and, after a brief tussle with a teller, opened an internal door, letting two of the other men enter the staff area. Armed with a screwdriver and a knife, these men removed a

8 *Smith v The Queen* [2001] HCA 50, [7]; *DSJ v The Queen* [2012] NSWCCA 9, [54].
9 *Smith v The Queen* [2001] HCA 50 [7].
10 *IMM v The Queen* [2016] HCA 14, [77] (Gageler J, quoting Sir Richard Eggleston).
11 *Smith v The Queen* [2001] HCA 50.

sum of $16,600 from the cash drawers.[12] The fourth man, alleged to be the appellant, remained standing near the door, dressed in a jumper with a hood that was raised so as to partially obscure his facial features.

During the robbery, the bank's surveillance camera took a photograph each second, and later two police officers claimed to recognise the appellant from enlarged versions of these 'black and white and mostly grainy'[13] images. The officers did not claim to recognise any distinctive feature possessed by the appellant, such as a tattoo or unusual facial feature, but instead based their evidence on their familiarity with the overall appearance of the appellant.[14]

Upon his arrest, the appellant was interviewed by police and denied any involvement in the robbery. His home was searched, but the search did not reveal any evidence linking him to the crime. Of the eight eyewitnesses to the robbery, none was able to identify the appellant from a video compilation of male faces.[15] Accordingly, the only evidence that linked him to the robbery was that of the police officers. During the trial, it was put to each of the police officers that their evidence was fabricated, allegations that were 'roundly denied'.[16] The appellant did not give evidence at the trial, although his mother testified that it was her son's usual practice to spend Thursdays and Fridays with her at a different location to that of the robbery.

After a three-day trial, the appellant was convicted of the offence of robbery in company. He was sentenced to a minimum term of three years and 10 months' imprisonment, with an additional term of three years and two months' imprisonment.[17] His appeal to the Court of Criminal Appeal against his conviction was unsuccessful. The High Court, however, upheld his appeal, setting aside the

12 *R v Smith* [1999] NSWCCA 317; Transcript of Proceedings, *R v Smith* (District Court of New South Wales, Latham J, 31 August 1998).

13 Katherine Biber, *Captive Images: Race, Crime, Photography* (Routledge-Cavendish, 2007), 1.

14 Transcript of Proceedings, *R v Smith* (District Court of New South Wales, Latham J, 31 August 1998).

15 *Smith v The Queen* [2001] HCA 50, fn 26 (Kirby J).

16 Transcript of Proceedings, *R v Smith* (District Court of New South Wales, Latham J, 31 August 1998).

17 *R v Smith* [1999] NSWCCA 317.

order of the Court of Criminal Appeal and remitting the matter to the District Court for a retrial. After reviewing the police officers' testimony at the trial, a majority of judges in the High Court concluded that it was irrelevant and should not have been admitted into evidence.

The cornerstone of the majority judgment was the conclusion that the police officers were in no better position than the members of the jury to recognise the appellant from the CCTV images. The majority found that the police officers had limited prior familiarity with the appellant's appearance, which had not changed between the time of the robbery and the trial, so that, 'by the time the evidence had concluded, the jurors had probably spent more time in the presence of the appellant than had the police witnesses before they gave their evidence'.[18] Accordingly, as a matter of logic, their evidence could not 'rationally affect (directly or indirectly)' the jury's assessment of the whether or not the accused and the offender were the same person.[19] It was, in effect, no more relevant than that of a 'member of the public who had been sitting in court observing the proceedings'.[20]

However, in an oft-cited passage, the majority left open the possibility of recognition evidence would be admissible, including when

> ...it goes to an issue about the presence or absence of some identifying feature other than one apparent from observing the accused on trial and the photograph which is said to depict the accused. Thus, if it is suggested that the appearance of the accused, at trial, differs in some significant way from the accused's appearance at the time of the offence, evidence from someone who knew how the accused looked at the time of the offence, that the picture depicted the accused as he or she appeared at *that* time, would not be irrelevant. Or if it is suggested that there is some distinctive feature revealed by the photographs (as, for example, a manner of walking)

18 *Smith v The Queen* [2001] HCA 50, [9].
19 Ibid, [11].
20 Ibid, [9].

> which would not be apparent to the jury in court, evidence both of that fact and the witness's conclusion of identity would not be irrelevant. Similarly, if, as was the case in *R v Tipene*, there is an issue whether photographs of different incidents depict the same person, evidence given about the identity of the person depicted may not be irrelevant.[21]

In a dissenting judgment, Kirby J agreed that the recognition evidence was inadmissible, but for different reasons. He held that the evidence was relevant to the issue of identification (and later reiterated this view, noting that he was of the view that the evidence was 'even perhaps too relevant').[22] In this regard, he noted that the test of relevance was broad and the police officers were better placed to recognise the appellant in the photographs because of their prior familiarity with him. In so finding, he noted that previous case law had recognised the relevance and admissibility of evidence of this nature.[23] However, he held that the evidence was opinion evidence, and as it did not satisfy any of the exceptions to the opinion rule (including the exceptions for lay opinion evidence and expert opinion evidence), it was inadmissible.[24]

The problem with *Smith*

After it was handed down, the judgment in *Smith* was noted in several current awareness newsletters.[25] It was also later summarised in evidence law textbooks and online papers prepared by legal professionals.[26] In *Captive Images: Race, Crime, Photography*, Katherine Biber engaged in a detailed analysis of the use the surveillance images in the trial of Mundarra Smith to explore the issues of

21 Ibid, [15] (footnotes omitted).
22 The Hon Michael Kirby, 'Obituary' (Speech delivered at the Memorial Occasion for the Late Paul Byrne SC, Sydney, 28 May 2009).
23 *Smith v The Queen* [2001] HCA 50, [41].
24 Ibid, [58]–[62].
25 See, eg, 'Case Digest—Evidence; Smith v R ', (2001) 8(9) *CrimLN* 78; 'Case Notes—Evidence—Smith v R', (Pt 1) (2001) 1(1) *CLNV*; 'Case Notes—Evidence—Smith v R', (2001) 4(5) *CLNQ* 56.
26 See, eg, John Stratton, *Criminal Law Survival Kit: Evidence* (10 September 2016) <http://www.criminallawsurvivalkit.com.au/evidence.html>; J D Heydon, *Cross on Evidence* (LexisNexis Australia, online ed), [1370]; Mark Dennis, 'Identification, Alibi and the "Electronic Snail Trail"' (2009), 21.

photography, indigenous identity and criminal justice.[27] Otherwise, and surprisingly, the case attracted very little critical academic attention.

The judgment was discussed, however, by the ALRC, the NSWLRC and the VLRC in their joint inquiry into the operation of the uniform Evidence Acts. In their final report, the Commissions summarised the judgment and noted that there were different views on whether or not it overly constrained the admissibility of police recognition evidence. For example, the Commissions noted that evidence law scholar Jeremy Gans, Victoria Police and several judicial officers had expressed concern about the consequences of the judgment, while the Law Society of NSW and the NSW Public Defenders Office had submitted that it was correctly decided. Other stakeholders, such as the Australian Federal Police and the NSW Office of the Director of Public Prosecutions (ODPP) had submitted that the judgment could be distinguished on its facts.[28] The ALRC ultimately concluded that *Smith* did not pose an excessive constraint on the admissibility of police identification evidence as it left open the possibility that the evidence would be relevant when the witness was at an advantage in recognising the person in the photographs, and was based on a peculiar and limited set of facts and that it could be distinguished in appropriate cases.[29]

The Commissions did not engage in any detailed academic analysis or critique of the factual conclusions in *Smith* or the legal reasoning employed by the majority when determining the case, and no such task has been undertaken in the academic literature. The reasons for this are unclear. It may be that the ultimate outcome in *Smith* was desirable. Few would argue that there was something deeply unsettling about a young Indigenous man's conviction for armed robbery resting solely on the largely untestable evidence of two police officers, both of whom claimed to recognise him in imperfect, monochrome images. Alternatively, the outcome in

27 Katherine Biber, 'The Hooded Bandit: Aboriginality, Photography and Criminality in *Smith v The Queen*' (2002) 13(3) *Current Issues in Criminal Justice* 286; Katherine Biber, *Captive Images: Race, Crime, Photography* (Routledge-Cavendish, 2007).

28 Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Uniform Evidence Law*, Report No 102 (2005), [9.15]–[9.21].

29 Ibid, [9.22]–[9.23].

Smith may have been unsurprising given that the opinion rule had been utilised to exclude recognition evidence of a similar nature in the past. Regardless, the lack of critique of *Smith* means that it is poorly understood by many in the legal community. Indeed, a number of currently available legal resources erroneously claim that the judgment is authority for the proposition that police are not permitted to give evidence that they recognise a person depicted in CCTV images.[30] For example, the NSW Civil Trials Bench Book states that

> Where evidence of identification depends on a photograph taken by a security camera, it is for the jury to determine whether the accused is shown in the photograph, and evidence by a police officer that he had made such an identification from the photograph cannot logically affect the jury's task'.[31]

The following section of this chapter aims to remedy the confusion and lack of discourse about *Smith* by dissecting and analysing the judgment. From the outset, it is important to note that the 17-paragraph majority judgment is remarkably brief given its far-reaching ramifications for criminal investigations and prosecutions in Australia. This brevity should not be attributed to a lack of understanding among the High Court judicial officers about the importance of the judgment. During oral argument on the application for leave to appeal, the Court was informed that gathering evidence from police officers who claimed to recognise the person depicted in CCTV images was a practice which was 'becoming more frequently used by police'.[32] Indeed, Mundarra Smith had been jointly tried with an alleged co-offender, Nicholas, whose image had also been recognised by a police officer who was shown CCTV images of the robbery. Further, the judgment in *Smith* was determinative of two related appeals that were heard simultaneously in the Court

30 John Stratton, *Criminal Law Survival Kit: Evidence* (10 September 2016) <http://www.criminallawsurvivalkit.com.au/evidence.html>.

31 Judicial Commission of New South Wales, *Criminal Trial Courts Bench Book*, [4–0200]. See also John Stratton, *Criminal Law Survival Kit: Evidence* (10 September 2016) <http://www.criminallawsurvivalkit.com.au/evidence.html>.

32 Transcript of Proceedings, *Smith v The Queen* [2000] HCATrans 551 (8 September 2000).

of Criminal Appeal,[33] and in these matters the appellants had all been convicted of robberies on the basis of evidence from police officers who claimed to have recognised them in CCTV images.[34] It is possible that the superficial reasoning in the majority's judgment was a consequence of the fact that the issue of relevance was raised for the first time by the justices of the High Court. As Kirby J noted in his dissenting judgment, this meant that the Court had 'neither the advantages of an express ruling on the point by the trial judge nor analysis and opinion of the Court of Criminal Appeal'.[35]

The factual conclusions

The majority judgment in *Smith* rests solely on the factual conclusion that 'the data available to the jury for its resolution was no different in any significant way from the data upon which the police officers based their asserted conclusion'.[36] Although the majority did not provide any detail about the nature and extent of the police officers' prior familiarity with the appellant, it is clear that they did not consider it to be substantial. They noted that by the conclusion of the trial, the members of the jury had 'probably' spent more time in the presence of the appellant than the police officers had before giving their evidence.[37]

The issue of time in the presence of the appellant was first raised during the hearing of the appeal in the High Court of Australia, during which the following exchange took place:

> **GLEESON CJ:** How long did this trial last?
>
> **MR SEXTON:** I think it was over a couple of days, but Mr Ellis is just - three days Mr Ellis says, your Honour.

33 Transcript of Proceedings, *Smith v The Queen* [2001] HCATrans 214 (25 May 2001). These were appeals from *R v Morris* [1999] NSWCCA 326; *R v West* [1999] NSWCCA 325.

34 Katherine Biber, 'The Hooded Bandit: Aboriginality, Photography and Criminality in *Smith v The Queen*' (2002) 13(3) *Current Issues in Criminal Justice* 286, 287.

35 *Smith v The Queen* [2001] HCA 50, [23].

36 Ibid, [9].

37 Ibid.

> **GLEESON CJ:** I was only going to ask whether or not, by the time this trial was over, the members of the jury had spent more time in the company of the accused than either of these police officers ever had.
>
> **MR SEXTON:** I imagine they had, your Honour ...[38]

It appears that this brief, oral exchange was the basis for the conclusion that, by the time the jurors were required to deliberate, they possessed as much knowledge about the appearance of the appellant as the police officers did were when they were called to testify. Despite the importance of the point, however, there was no detailed analysis of the inevitable vicissitudes of the trial. Did the trial judge, the lawyers, the jurors or the witnesses encounter any difficulties attending court that delayed the progress of the proceedings? How much time did the jury spend outside the courtroom while counsel argued points of law or discussed aspects of trial procedure? Did the trial judge request the jury wait outside the courtroom while she delivered reasons for decisions about the admissibility of evidence? Were there any technical difficulties with the equipment in the courtroom that temporarily halted the flow of the evidence?

A close analysis of the trial transcript reveals that the Crown's concession and the majority's conclusion about this issue was in fact correct—by the conclusion of the trial, the jury appear to have spent approximately 10 hours in the presence of the appellant, a greater amount of time than it appears from the evidence at the trial that either of the police officers had spent in his company.[39] However, while it is true that the members of the jury were in relatively close physical proximity to the appellant and his co-accused, Jason Nicholas, it is by no means clear that they engaged in any prolonged, close analysis of their appearance during this time. The trial, although relatively short in duration, was conducted expeditiously. The appellant and Nicholas were arraigned at around mid-morning on the first day of the trial. From this point onwards, the proceedings were conducted at some pace. The jury was empanelled, the trial judge made her opening remarks, the

38 Transcript of Proceedings, *Smith v The Queen* [2001] HCATrans 214 (25 May 2001).

39 It is difficult to accurately calculate the amount of time the jury spent in the courtroom as the trial transcript does not always reveal the times that the proceedings commenced and concluded.

Crown Prosecutor presented his opening address, seven witnesses testified, four witness statements were tendered and read to the jury, a video containing a compilation of male faces was played to the jury and a number of photographic exhibits were tendered. Similarly, the next day, the jury heard from seven witnesses, watched a 25-minute video of the appellant's interview with police, and received a number of photographic exhibits.

Hence, while the jurors were 'in the presence of the appellant' during the course of the trial, the demands placed on their attention were considerable. It can and should be assumed that their powers of observation were being employed to hear and interpret testimonial evidence, scrutinise the demeanour of witnesses and analyse exhibits. For this reason, it is difficult, if not impossible, to draw conclusions about their degree of familiarity with the appellant's appearance based on a bare calculation of the numbers of hours and minutes they spent in the courtroom during the proceedings. It is surprising, in light of the scrutiny typically directed to the opportunity that an eyewitness had to observe an offender prior to identifying him or her during an identification procedure, that so little attention was paid to the variables that could have affected the jury's ability to compare the appellant to the CCTV images in this matter. While the time spent viewing the appellant was one such variable, others included the distance between the jury panel and the dock, the angle from which the jurors viewed the appellants, and the lighting in the courtroom.

Of greater concern, however, is the fact that that the majority unthinkingly adopted a purely quantitative approach to the issue of familiarity, particularly the familiarity of a face. That is, the majority assumed that facial familiarity is simply a consequence of the amount of time spent viewing a person. However, there is extensive psychological literature about face learning and processing which indicates that familiar face recognition is a complex, multi-stage process that does not depend solely on the amount of time a person has spent viewing another person. The Court failed to avert to the possibility that the police officers' familiarity with the appellant may have been qualitatively different from that of the jury. For example, as Kirby J noted in his dissenting judgment, the members

of the jury observed the appellant 'sitting immobile in the courtroom', while the police officers had

> repeatedly viewed the appellant in daylight. They had seen him in motion. They had observed him from different angles. They had the opportunity to view him engaged in varying and more natural facial movements.[40]

This observation accords with the most recent psychological literature which indicates that viewing a face in different lighting conditions and from different viewpoints assists in the process of familiarisation by helping us to 'eliminate the properties of the image that are not diagnostic of identity'.[41] As Bruce and Young observe, 'the key to what makes a face familiar is the simple one that we have seen enough instances of that face across a sufficiently wide range of conditions.'[42] Further, research indicates that '[s]eeing a face move when learning its identity also seems to be an advantage'.[43]

In addition to seeing the accused in motion and in different settings, the police officers' familiarity with the appellant was based on incremental and cumulative sightings of him over a period of six months. One police officer had interacted with the appellant on five or six occasions during this time and had arrested him 'a couple of times', after which he had spent two or three hours in his company.[44] The other gave evidence that

> There are three specific times that I can recall actually stopping, getting out of the car and speaking to him. There's other occasions

40 *Smith v The Queen* [2001] HCA 50, [42] (Kirby J).

41 See Robert A Johnston and Andrew J Edmonds, 'Familiar and Unfamiliar Face Recognition: A Review' (2009) 17(5) *Memory* 577.

42 Vicki Bruce and Andy Young, *Face Perception* (Psychology Press, 2012), 299.

43 Karen Lander and Natalie Butcher, 'Recognising and Learning Faces in Motion' in Caroline Wilkinson and Christopher Rynn (eds), *Craniofacial Identification* (Cambridge University Press, 2012), 133.

44 *R v Smith* [1998] (Unreported, District Court of New South Wales, Latham J, 31 August 1998).

> where I've driven past and seen him, and there's other times that I've been in the background of things, seen what's going on.[45]

Accordingly, the court could have explored the effect of seeing the appellant a number of times at spaced intervals on the police officers' familiarity with his appearance. Further, there could also have been a discussion of the impact of the police officers' occupation on their ability to 'learn faces'—that is, a discussion of whether or not they had undergone any testing relating to their ability to recognise faces, and whether or not, during the process of arresting the appellant, any time was specifically dedicated to 'learning' his appearance, either by making a written record of his appearance or capturing a visual record of his appearance at the time of his arrest. While the appellant denied that the fact that the recognition evidence had been given by police officers was relevant to the determination of the appeal, the occupation of the witnesses loomed large in the oral arguments, with the appellant's counsel referring to the increasingly popular investigative practice of police officers identifying offenders from CCTV images on several occasions. As such, the issue of the adduction of recognition evidence from police officers as a class of witness warranted closer judicial scrutiny.

The relevance issue

In addition to the poorly reasoned factual findings outlined above, the majority's approach to the issue of relevance under the *Evidence Act 1995* (NSW) can also be criticised. As noted above, the majority concluded that the police officers' evidence was irrelevant, and therefore inadmissible, because the witnesses were in no better position than the members of the jury to draw conclusions from the CCTV images about the identity of the offender. When arriving at this conclusion, however, the majority failed to give any detailed consideration to the role of the relevance provisions in the larger scheme of the Act. While the majority judgment cites the statutory provisions and attempts to apply them to the facts in the case, it does not discuss their larger purpose in the context of the Act.

45 Transcript of Proceedings, *R v Smith* (District Court of New South Wales, Latham J, 31 August 1998).

Under the Act, relevance 'is the first prerequisite to the admissibility of evidence'.[46] The tests for relevance are 'stated in all their generality for application to millions of questions asked every year in the great variety of cases to which the Uniform Evidence Acts apply.'[47] As such, the relevance threshold was designed to be low. The relevance provisions were designed to enable the admission of all evidence which may have a rational bearing on the issues (and in doing so promote accurate fact-finding in legal disputes).[48] That the test for relevance is undemanding is reinforced by the ALRC's discussion of relevance in its interim report on evidence, upon which the Act was based,[49] and the structure of the Act, which clearly shows that 'the major battleground of exclusions will lie in applying the various exceptions once evidence is accepted as relevant.'[50] It is also reinforced by the fact that there is no discretion to admit irrelevant evidence.[51]

Section 55 of the Act requires only that there be a 'minimal logical connection between the evidence and the "fact in issue"'.[52] In other words, there must be a rational link between the evidence in question and the evaluation of a matter in issue in the proceedings. Put more simply, the evidence must simply relate to, or have a bearing on, the matter in issue.[53] To show this, the party seeking to adduce the evidence must be able to point to a process of reasoning by which the information in question could affect the jury's assessment of the probability of a fact in issue at the trial.[54]

On the facts of *Smith*, there was a 'minimal logical connection' between the impugned evidence and a fact in issue. The evidence of the police officers that they recognised the accused in the CCTV images had the potential to affect the

46 *Smith v The Queen* [2001] HCA 50, [19] (Kirby J).
47 *Evans v The Queen* [2007] HCA 59, [95].
48 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [82], [638].
49 Ibid, [313]–[318].
50 *Smith v The Queen* [2001] HCA 50 [25] (Kirby J).
51 *Evidence Act 1995* (NSW), s 56.
52 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [641].
53 Ibid, [314]–[315].
54 *Washer v Western Australia* [2007] HCA 48, [5].

jury's assessment of the identity of the person involved in the armed robbery. The process of reasoning by which the evidence could affect the jury's assessment of the issue was not 'irrational', but rather very simple. The fact that someone with any amount of familiarity with the appellant's physical appearance was of the view that he was the person who could be seen in the images could: (i) encourage the fact-finder who was unable to form a view on the matter to arrive to the same conclusion as the witness; or (ii) bolster or reduce the fact-finder's confidence in his or her independently formed conclusion about whether the offender and the accused were the same person. Further, under the scheme of the Act, the relevance of evidence must also be considered taking into account all other admitted evidence or evidence still to be called.[55] Accordingly, the fact that two police officers 'spontaneously and separately'[56] identified the accused could have affected the ability of the evidence to rationally affect the probability of the existence of a fact in issue. Nevertheless, the majority failed to advert to this fact in its judgment and instead examined the recognition evidence from each witness in isolation.

The argument that the evidence was relevant is also supported by large body of pre-existing case law in which similar evidence has been admitted without any indication that it may not have been relevant. Prior to *Smith*, there was a line of authority under the common law that evidence from a witness that he or she recognised a person in surveillance images was admissible. For example, in *R v Palmer*, Street CJ noted that he 'entertain[ed] no doubt' as to the admissibility of the evidence of witnesses who recognised the accused from still CCTV images of a bank robbery and observed that he could see 'no justifiable basis, either in principle or on authority, for precluding this evidence from being placed before the court'. [57] The admissibility of recognition evidence based on images had also been confirmed in a number of other cases, both in NSW and in other Australian and overseas jurisdictions.[58]

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55 *Evans v The Queen* [2007] HCA 59, [177] (Heydon J).
56 *Smith v The Queen* [2001] HCA 50, [43] (Kirby J).
57 *R v Palmer* (1981) 1 NSWLR 209.
58 See, eg, *R v Cook* [1998] NTSC 125; *Smith v The Queen* (1983) 10 A Crim R 358; *R v Goodall* [1982] VR 33; *R v Anderson* 2005 BCSC 1346; *Attorney General's Reference No 2 of 2002* [2002] EWCA 2373.

Finally, when making their factual findings, the majority did not advert to the fact that its conclusion that evidence is irrelevant when it is based on the same data as that available to the jury has potential application in many other situations. In some cases, for example, a person who monitors live CCTV images may witness a criminal offence occurring. Previous authority has determined that this is 'eyewitness type evidence' that is relevant and admissible.[59] However, after *Smith*, this evidence could be irrelevant if the same footage was available to be shown to the jury. Similarly, in cases where high quality colour images of an offence are available in addition to eyewitness testimony, will it be necessary to establish that the eyewitness' account of events is based on data not available to the jury, such as sound or smell or touch, in order for it to be relevant? At what point will imagery, such as that filmed by a body-worn camera, be considered equal or superior to the lived experience of the witness?

Failure to consider the opinion rule

The majority's conclusion about the relevance of the recognition evidence in *Smith* meant that it was not required to consider other provisions of the Act which may have rendered the evidence inadmissible. However, at the appellant's trial, and during the hearing of the appeal in the NSW Court of Criminal Appeal, the primary issue was whether or not the evidence of the police officers could be classified as fact or opinion evidence. Under s 76 of the Act, opinion evidence 'is not admissible to prove the existence of a fact about the existence of which the opinion was expressed'. There are, however, two primary exceptions to this rule: (i) an exception for lay opinions; and (ii) an exception for opinions based on specialised knowledge.[60] Accordingly, if the evidence were classified as opinion evidence, it would be necessary to decide whether it fell within one of these exceptions so as to be admissible.[61]

59 *R v Sitek* (1987) 26 A Crim R 421.
60 *Evidence Act 1995* (NSW) ss 78–79.
61 The application of the opinion rule to recognition evidence is discussed in Chapter 4.

The focus of the parties on the opinion rule was appropriate and correct in light of the existing case law at the time of the trial and the appeal. The opinion rule had previously been used to exclude recognition evidence based on images. In *Griffith,* for example, the Court, when considering the common law lay opinion principle, held that

> The knowledge [by the police officers, of the appellants past appearance] did not give the officers any advantage over the jury. ... ordinarily opinion evidence that a person present in court (but observed by the witness at earlier times) looks very much like a person depicted in a photograph before the court will not be admitted when there is no circumstance giving the witness in question a substantial advantage over the court. [62]

The judgment in *Griffith* was cited during argument on the application for special leave to appeal in the matter of *Smith*, as was a judgment of the Supreme Court of Canada, *R v Leaney*,[63] which also dealt with the application of the opinion rule to evidence of recognition of a person in CCTV images. Nevertheless, the majority did not discuss the opinion provisions in the Act and did not canvass the possibility that their interpretation of the relevance provisions would result in the overlapping of the functions of the relevance and opinion provisions of the Act.

Today, the overlap in the functions of the provisions caused by *Smith* is most apparent when considering the admissibility of 'facial mapping' or 'body mapping' evidence under s 79 of the Act. After the judgment in *Smith*, 'Australian police, prosecutors and judges ... increasingly looked to experts to interpret *incriminating* photographs and videos'.[64] In several cases, a party has called, or attempted to call, evidence from a witness with expert qualifications in a field such as anthropology and anatomy to prove the identity of a person depicted in the

62 *R v Griffith* (1995) 79 A Crim R 125.
63 *R v Leaney* [1989] 2 SCR 393.
64 Gary Edmond et al, 'Law's Looking Glass: Expert Identification Evidence Derived from Photographic and Video Images' (2009) 20(3) *Current Issues in Criminal Justice* 337, 338.

CCTV images.[65] In some of these cases, it has been held that the evidence has failed to satisfy the s 79 exception to the opinion rule because it was not 'wholly or substantially' based on the witness' specialised knowledge.[66] However, instead of concluding that the evidence was therefore inadmissible opinion evidence, courts have used this finding to hold that the evidence was irrelevant. Because the witness' opinion was not based on his specialised knowledge, '[a]ll that was established was that that he looked at a photo with the naked eye and endeavoured to relate what he saw',[67] something that the members of the jury could do themselves.[68]

The cases reveal the problem with the High Court's narrow approach to relevance in *Smith*. The conclusion that identification evidence will be irrelevant if it is based on the same material that is available to the fact-finder has had the unforeseen consequence of inverting the order of analysis of issues relating to the admissibility of opinion evidence. It is only once it is determined that the expert's opinion is not based on his or her specialised knowledge that it becomes apparent that his or her identification evidence is based on the same material as that which is available to the jury. In other words, it is when the expert's evidence is not based on his or her specialised knowledge that the expert is in the exactly the same position as the fact-finder when it comes to the task of comparing images. And it is only at that point that the issue of relevance can be determined.

While the ultimate outcome is the same whether or not the evidence is excluded for failing to satisfy the s 79 exception to the opinion rule or for failing to satisfy the relevance provisions (that is, the evidence is excluded), the situation remains unsatisfactory. It is undesirable that, in order to determine the relevance of expert opinion evidence, there must first be a comprehensive inquiry into whether or not

65 *In the Matter of the Appeal of BLM* (Unreported, District Court of New South Wales, Blanch CJ, 14 September 2005); *R v Tang* [2006] NSWCCA 167; *R v Jung* [2006] NSWSC 658; *R v Kaliyanda* (Unreported, Supreme Court of New South Wales, Hislop J, 17 October 2006); *R v Ali Alrekabi* [2007] NSWDC 110; *Morgan v The Queen* [2011] NSWCCA 257; *R v Hawi (No 24)* [2011] NSWSC 1670; *Honeysett v The Queen* [2013] NSWCCA 135.

66 *R v Hawi (No 24)* [2011] NSWSC 1670; *Morgan v The Queen* [2011] NSWCCA 257.

67 *R v Hawi (No 24)* [2011] NSWSC 1670, [10].

68 Ibid. See also *Morgan v The Queen* [2011] NSWCCA 257, [143]–[144]. Compare *R v A* [2010] SADC 126.

an expert's opinion is based on his or her specialised knowledge. Questions of relevance should be a matter of simple logic and should not require the expenditure of significant amounts of the court's time and resources to determine. As Kirby J noted in *Evans*, it is a mistake to require the relevance provisions to do the work of other provisions in the *Evidence Act*.[69]

The High Court had the opportunity to consider this evidentiary complexity in *Honeysett v The Queen*.[70] In this matter, the Court unanimously held that an expert witness' evidence was not wholly or substantially based on his specialised knowledge of anatomy, but was rather 'a subjective impression of what he saw when he looked at the images'.[71] Accordingly, it was inadmissible as it failed to satisfy the s 79 exception to the opinion rule. Consistently with the approach in the cases discussed above, this finding could have been used to hold that the evidence was irrelevant. Confusingly, however, despite noting that the defence had raised the 'basal test of relevance',[72] and despite numerous High Court judgments affirming the necessity in any question of the admissibility of evidence to first determine that it is relevant,[73] the High Court held that the failure of the evidence to satisfy s 79 meant that the appellant's argument about relevance was 'not reached'.[74]

Uncertainty and inconsistency: The application of *Smith*

As was expected at the time the judgment was delivered, *Smith* has had far-reaching ramifications for criminal prosecutions in Australia. It has been cited, discussed, applied or distinguished in a large number of published judgments, with trial and appellate courts in every jurisdiction grappling with its application to a variety of different factual scenarios.[75]

69 *Evans v The Queen* [2007] HCA 59, [103].
70 *Honeysett v The Queen* [2014] HCA 29.
71 Ibid, [43], [46]. The judgment in *Honeysett* is discussed further below.
72 Ibid, [3].
73 *Roach v The Queen* [2011] HCA 12, [12]–[13].
74 *Honeysett v The Queen* [2014] HCA 29, [4].
75 Cases distinguishing *Smith v The Queen* [2001] HCA 50 are discussed in Chapter 4.

This section of the chapter explores the difficulties faced by courts attempting to apply *Smith*—a single-issue prosecution that relied solely on recognition evidence—in subsequent and often more complex criminal proceedings. It outlines the problems that have arisen, and which will continue to arise, when attempting to apply the majority's reasoning to a diverse range of evidentiary material. It is based on an analysis of 138 published judgments in criminal matters which cite, discuss or attempt to apply *Smith* (although it must be noted that some of these matters deal with other forms of comparison evidence, such as footprint comparison evidence or fingerprint evidence).[76] These judgments have been delivered by courts in all Australian states and territories (including non-*Evidence Act* jurisdictions, for there is little difference between the common law and the provisions of the uniform Evidence Acts dealing with relevance).[77] The majority of the cases were located by searching LexisNexis' Casebase Case Citator, although some were located as they were cited in other judgments.

While no attempt has been made to undertake any quantitative analysis of the cases, they have shed light on the different ways in *Smith* has been judicially approached since 2001. In summary, they reveal that the judgment has been incorrectly referred to as imposing a blanket ban on recognition evidence based on CCTV images in at least seven reported cases,[78] and in four of these this conclusion was determinative of the admissibility of the evidence.[79] As such, the experience of the higher courts indicates that misinterpretation of the judgment has resulted in potentially relevant and probative evidence of identification being excluded (or held to have been inadmissible on appeal). Further, on at least one known occasion, confusion about the *ratio decidendi* of the judgment appears to

76 See Appendix 1 for a full list of these cases.

77 *HML v The Queen* [2008] HCA 16, [5]; *R v Maiolo (No 3)* [2014] SASCFC 89, [66]; *Washer v Western Australia* [2007] HCA 48, fn 4.However, note that the relevance provisions of the *Evidence Act 1995* (NSW) do not draw a distinction between logical and legal relevance as does the common law.

78 *R v Perese* [2001] NSWCCA 467; *R v Surrey* [2005] QCA 4; *R v Gassy* [2004] SASC 338; *R v Poile* [2016] ACTSC 262; *R v Rix* [2004] NSWSC 422; *Western Australia v Bilos* [2008] WASC 226; *R v Winters* [2010] SASC 100.

79 *R v Perese* [2001] NSWCCA 467; *R v Surrey* [2005] QCA 4; *R v Gassy* [2004] SASC 338; *R v Poile* [2016] ACTSC 262.

have been behind the decision of prosecutors to not attempt to adduce potentially admissible recognition evidence.[80]

In addition to these problems, the lack of guidance from the High Court about several issues pivotal to the determination of the relevance of recognition evidence based on CCTV images, including: (i) the degree of prior familiarity needed before a witness' recognition evidence will be relevant; and (ii) the consequences of recognition evidence being based on poor quality images, has meant that courts have taken inconsistent approaches to the admission of recognition evidence in a number of cases involving CCTV images. The issues of misapplication and inconsistent interpretation of *Smith* are discussed further in the following section.

Misapplication of the judgment

As noted above, in some of the cases analysed, evidence of recognition from CCTV images has been excluded with little or no analysis of the reasoning in *Smith*. For example, in *R v Perese*, the NSW Court of Criminal Appeal held that recognition evidence of a police officer who had identified the appellant as being the offender in images of a bank robbery should not have been admitted at the appellant's trial. In arriving at this conclusion, the Court did not discuss the nature of the police officer's prior familiarity with the accused, the opportunity the jury had to observe the accused at trial, or whether or not the appearance of the appellant had changed between the time of the offence and the time of the trial (which occurred over two years after the robbery). Instead, the Court incorrectly held that *Smith* had established, in effect, a blanket rule against the admissibility of this type of recognition evidence. It stated that recognition evidence based on CCTV images would not be relevant unless there was 'an issue other than whether the person in the photograph is the accused'.[81] Similarly, in *R v Surrey*, the Queensland Court of Appeal held that recognition evidence from a witness who had known the accused for 14 years should not have been adduced at trial as the

80 *R v Hassan* [2004] VSC 84.
81 *R v Perese* [2001] NSWCCA 467 [11].

judgment in *Smith* established that 'the comparison between the person photographed and [the appellant] was a matter for the jury and not the opinion of a witness'.[82]

Erroneous understandings of *Smith* may also have an effect on the forensic decision-making of advocates in criminal proceedings. For example, in one trial involving a charge of the offence of murder, the Crown conceded that it could not lead any evidence from witnesses who claimed to recognise the accused in CCTV images 'in accordance with the reasoning in Smith's case'.[83] In this matter, however, the accused's appearance at trial differed from his appearance at the time of the offence. In these circumstances, the trial judge expressed some surprise at the concession, noting it was 'unduly favourable to the accused' as the judgment in *Smith* was 'not apposite'.[84]

It is possible that the published judgments which reveal that potentially admissible and probative recognition evidence has been withheld from the fact-finder on the basis of misinterpretation of *Smith* are representative of a wider problem in the criminal justice system. While it is impossible to know with any certainty how many judicial decisions about the admissibility of evidence have been made on an incorrect understanding of the import of *Smith*, anecdotal evidence indicates that it may be common. Several judgments which mention *Smith* in passing have summarised it as authority for the proposition that identification of an accused from CCTV images is inadmissible.[85] In its submission to the ALRC, VLRC and NSWLRC's inquiry into the uniform Evidence Acts, the NSW Director of Public Prosecutions noted that *Smith* appeared to be widely misunderstood as preventing

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82 *R v Surrey* [2005] QCA 4. See also *R v Gassy*, where the South Australian Supreme Court held that evidence adduced from the cousin of the accused, who 'of course was very familiar with the accused's appearance over many years' should have been excluded because it was the accused's appearance at the time of the offence which was relevant: *R v Gassy* [2004] SASC 338, [142]. Further, in *R v Poile*, the Supreme Court of the Australian Capital Territory applied *Smith* in a blunt manner to exclude recognition evidence without any discussion of whether the witness was in a better position than the trial judge to determine the issue of identity, or whether the appearance of the accused had changed between the offence and the trial: *R v Poile* [2016] ACTSC 262, [47]–[48].

83 *R v Hassan* [2004] VSC 84, [6].

84 Ibid, [6]–[7].

85 See, eg, *Western Australia v Bilos* [2008] WASC 226, [35]; *Bullman v Debnam* [2010] ATSC 97, [19].

the admission of 'opinion' evidence.[86] After seeking comments from ODPP advocates about judicial interpretation of the judgment, the ODPP submitted that there had been instances where trial judges had been unwilling to admit recognition evidence despite the fact that the appearance of the accused had altered between the time of the offence and the time of the trial.[87]

Similarly, it is not possible to ascertain to what extent advocates refrain from attempting to lead potentially relevant recognition evidence because of a belief that it is inadmissible pursuant to *Smith*. In this regard, it is interesting to note that in one matter observed as part of research for this thesis, the prosecutor informed the court that the police officers involved in the investigation of the offence had formed views about the identification of the robber in the CCTV images, but that the Crown was not relying on the evidence as '[t]hat's a Mundarra Smith issue'.[88] The prosecutor did not elaborate on precisely how the evidence fell within the judgment in *Smith* and the trial judge accepted the submission without any further query.

Inconsistent approaches: Degree of prior familiarity

As discussed above, the fact that the police officers in *Smith* had limited prior familiarity with the appellant was a pillar in the foundation of the majority's conclusion that they were in no better position than the jury to undertake the task of comparing CCTV images to the accused. Accordingly, the degree of familiarity with the accused is of great importance when determining the relevance of recognition evidence based on CCTV images pursuant to *Smith.* There is little guidance in *Smith*, however, about how to approach the question of determining familiarity. In *R v Beattie*, Mason P noted this fact when he observed that '[i]t is not to me entirely clear what factors may or may not place the police witnesses in position of either equivalence or advantage.'[89]

86 New South Wales Office of the Director of Public Prosecutions, 'Response to the ALRC Discussion Paper 69 re the Evidence Acts' (16 September 2005).
87 Ibid.
88 *R v Gibson*, (District Court of New South Wales, July 2015).
89 *R v Beattie* [2001] NSWCCA 502, [22].

As discussed above, in some cases the witness' prior familiarity with the accused has not been considered at all when determining the relevance of the evidence.[90] In contrast, in *R v Marsh*, the NSW Court of Criminal Appeal held that evidence from the appellant's sister that she recognised him in a CCTV image published in the newspaper was admissible because

> Unlike the police officers in *Smith,* Ms Wood had grown up with her brother and had an ongoing association with him. The witness had the advantage, not shared by the jury, of the long time opportunity, which she asserted, of observing her brother and of noting his characteristics, his stature, his stance, his facial features, and the manner in which he wore his jacket, which the witness claimed was so familiar to her. Hence the evidence which Ms Wood was able to give and did give satisfied the requirement of relevance."[91]

R v Marsh, however, is the only case located that has distinguished *Smith* solely on the basis that the witness was highly familiar with the accused. In contrast, in *Andreou v Martin*, recognition evidence from a witness who was highly familiar with the accused was held to be irrelevant pursuant to *Smith*.[92] In this matter, three still images of the accused were circulated 'over the police computer',[93] at which point they were viewed by the accused's uncle (an Aboriginal Community Police Officer). The accused's uncle, who had known the accused from birth and had relatively constant interaction with him since that time, recognised the accused in the images. Nevertheless, the Northern Territory Magistrate's Court held that the evidence was irrelevant. The fact that the Court was in possession of images of the accused at the time of the offending meant that the witness was in no better position than the Court to recognise the accused in the images.[94]

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90 See also *Police v Dorizzi*, in which Gray J held that a security manager's evidence about the identity of security staff depicted in CCTV images was admissible because he had an unspecified amount of familiarity with the people and the scene: *Police v Dorizzi* [2002] SASC 82.

91 *R v Marsh* [2005] NSWCCA 331 [18].

92 *Andreou v Martin* [2016] NTMC 006.

93 Ibid, [14].

94 Ibid, [15].

While it will always be necessary to determine the degree of prior familiarity that a witness has with an accused on a case-by-case basis, it is desirable that there be some further judicial guidance about the factors that may be relevant to the determination of familiarity. It cannot be assumed that judicial opinions on familiarity will be consistent. In *Smith,* for example, the trial judge was content with the extent of the police officer's familiarity with the appellant, noting during her summing up that that they claimed to know the accused 'from, you might think, fairly lengthy association on a fairly regular basis over a period of time'.[95] This conclusion appears to have been accepted by Kirby J in his dissenting judgment when he noted that the police officers' evidence was based on 'their repeated contacts with the appellant in the six months prior to the recording of the photographs'.[96] However, as discussed above, such a conclusion was rejected by the majority, who held that the police officers were no more familiar with the appellant than the members of the jury or any person who had been sitting in the courtroom to observe the proceedings.[97]

The guidance provided could be based on that formulated in overseas jurisdictions. In Canada, for example, the courts have outlined indicia for determining the degree of familiarity that a witness has with an offender whom he or she claims to recognise. These include: '(i) the length of the prior relationship between the witness and the accused; (ii) the circumstances of the prior relationship between the witness and the accused; and, (iii) the recency of the contact between the witness and the accused prior to the event where the witness recognized the accused.'[98] In addition, any guidance on this issue could draw on insights from psychology regarding the process of face familiarisation.

95 Transcript of Proceedings, *R v Smith* (District Court of New South Wales, Latham J, 31 August 1998).
96 *Smith v The Queen* [2001] HCA 50, [43] (Kirby J).
97 Ibid, [9].
98 *R v Anderson* 2005 BCSC 1346, [25].

Inconsistent approaches: Quality of the footage

In *Smith,* the majority found that the photographic evidence was of sufficient quality to enable the members of the jury to compare it with the accused. In a parenthetical aside, the majority stated that '[h]aving regard to the quality of the photographs we saw, it is not clear that the jury could not have compared them with the accused'.[99] However, at the trial of the appellant, the quality of the photographs was in issue. The Crown conceded that the photographs were too unclear for the members of the jury to compare the images to the accused in the courtroom.[100] In other words, the Crown conceded that they were of such poor quality that the jury could not be satisfied beyond reasonable doubt about the identity of the offender based on the photographs alone. The cross examination of the police officers at the trial was directed to the quality of the photographs[101] and there was much discussion of the quality of the photographs at the hearing of the appeal in the High Court.[102] Despite this, the Court did not describe the photographs in any detail, nor indicate which of their features, either in isolation or combination, rendered them of sufficient quality to be used for the process of comparison with the accused.

The ramifications of this lack of guidance are evident in the subsequent jurisprudence. In a number of cases involving recognition from CCTV images, the quality of the images is not explored at all.[103] In others, the issue is touched upon without any rigorous exploration, and the images are simply described as being of 'good quality',[104] 'not particularly clear',[105] 'not of high quality'[106] or of 'relatively low quality'.[107] In other cases, judges go beyond these subjective descriptors and outline what can be seen in the images—for example, what

99 *Smith v The Queen* [2001] HCA 50, [9].
100 Katherine Biber, 'The Hooded Bandit: Aboriginality, Photography and Criminality in *Smith v The Queen*' (2002) 13(3) *Current Issues in Criminal Justice* 286, 287.
101 *Smith v The Queen* [2001] HCA 50, [34] (Kirby J).
102 Transcript of Proceedings, *Smith v The Queen* [2001] HCATrans 214 (25 May 2001).
103 *R v Marsh* [2005] NSWCCA 331.
104 *Haidari v The Queen* [2015] NSWCCA 126, [94].
105 *R v Gassy* [2004] SASC 338, [141].
106 *R v Banhelyi* [2012] QCA 357, [20].
107 *R v Dastagir* [2013] SASC 26, [24].

clothing the offender is wearing, and what the offender can be seen to be doing.[108] Rarely, however, is any further consideration given to the factors that affect image quality—that is, the clarity of the image, the amount of detail the image reveals, its colour and whether or not there are any artefacts (or aberrations) in the image.[109] Unsurprisingly, there is also no discussion of the numerous technical matters that can affect these issues, including, for example, image resolution levels, lighting levels (which may cause flare or silhouetting), lighting sources (which may affect the perception of colour), angle of view, frame rate, the distance between the lens and the subject, or the compression of the footage for storage purposes.[110] This may be due to the parties' lack of knowledge about these technical issues. For example, in *Sutherland*, a case observed for this thesis and discussed further below, the trial judge queried whether the CCTV footage of the robbery was in 'real time', to which counsel for the defence responded honestly, 'I have no idea Your Honour'. Accordingly, there is no body of jurisprudence to guide courts that are attempting to determine whether an image if an offender is of sufficient quality to enable a jury to compare it to an accused.

Also of concern is the fact that it is unclear how the quality of CCTV images will affect the admissibility of recognition evidence. The majority in *Smith* did not indicate how a finding that the images were of insufficient quality to enable the jury to undertake the necessary process of comparison would have affected the outcome of their decision. It is possible that it could have transformed potentially irrelevant recognition evidence into relevant evidence as a witness who is familiar with the appearance of an accused may be better placed to recognise him or her from indistinct images than the members of the jury. This was the approach taken in *Nguyen v The Queen*, where the court approved of the trial judge's finding that, 'the impact of poor quality photographs as here is likely to be less in the case of

108 See, eg, *R v Gardner* [2001] NSWCCA 381, [14]; *Sweeney v The Queen* [2003] WASCA 192, [22]–[25]; *R v Brease* [2013] QCA 249, [6].

109 N Cohen, J Gattuso and K MacLennan-Brown, 'CCTV Operational Requirements Manual 2009' Home Office, 40.

110 Ibid; Australia New Zealand Policing Advisory Agency and National Institute of Forensic Science, *Australia and New Zealand Police Recommendations for CCTV Systems* (2014); Glenn Porter, 'CCTV images as evidence' (2009) 41(1) *Australian Journal of Forensic Sciences* 11, 19.

someone who knows the person depicted well or very well'.[111] It is also the approach taken in *R v Sterling*, when the trial judge held that '[t]he familiarity of the witnesses with Mr Sterling, developed over a period of four months, places them in a position of advantage to identify him from the footage having regard to the fact that it is not very good quality.'[112] However, this approach was not taken in *R v Drollett*, when Simpson J noted that the extremely poor quality of the CCTV footage was a difficulty that existed equally for the witness and the jury and that, as such, it did not determine, or contribute to the determination, of the issue of the relevance of the witness' evidence.[113] Similarly, it was not taken in *Andreou v Martin*, where the fact that the CCTV images were not of sufficient quality to enable the magistrate to determine the issue of identity with any certainty was not held to have any effect on the relevance of the accused's uncle's recognition evidence.[114]

An alternative and antithetical consequence of the fact that CCTV images of an offender are of insufficient quality to enable a jury to compare them with the accused is that the images may be excluded under ss 135 or 137 of the Act (provisions which balance the probative value of the evidence against the other dangers, including the danger of unfair prejudice to the accused). In *R v Hall*, for example, recordings of lawfully intercepted telephone conversations were excluded because their quality was so poor that their probative value was difficult to ascertain.[115] On the other hand, they had significant prejudicial effect—namely, the fact that the tapes were so indistinct meant that there was a risk that members of the jury would speculate about what could be heard on them.[116] By analogy, the same type or reasoning could be applied to CCTV images. In *R v Perese*, the NSW Court of Criminal Appeal implied that this course of action could be taken for CCTV images when it held that the images in question were not of such poor quality that 'it would be appropriate for this Court to determine that the appellant

111 *Nguyen v The Queen* [2007] NSWCCA 363.
112 *R v Sterling* [2014] NSWDC 199, [51]. This is also the approach taken in a number of US cases: see, eg, *United States v White* F 3d (7th Circ April 06, 2011); *Nooner v State* 907 SW 2d 677 (1995).
113 *R v Drollett* [2005] NSWCCA 356, [47].
114 *Andreou v Martin* [2016] NTMC 006.
115 *R v Hall* [2001] NSWSC 827.
116 Ibid, [53].

should not stand trial'.[117] Despite this, arguments to exclude CCTV images under s 137 have only been made in a small number of published judgments and have not yet been successful. [118]

Smith in practice

This section moves beyond an examination of the judicial application of *Smith* to examine some of the difficulties of applying the judgment in practice. It begins by discussing *R v Sutherland*, a case observed for the purposes of research for this thesis which provides a current example of the complexity involved in applying the judgment in *Smith* to other factual scenarios. Next, it draws on an analysis of case law, as well as observation fieldwork, to argue that the reasoning of the majority is often difficult to apply in practice, particularly as it requires an assessment of the ability of the fact-finder to observe the accused and the quality of the fact-finder's observations of the accused. Finally, it argues that the omission of recognition evidence based on CCTV images may have undesirable consequences in practice, such as the presentation of an incomplete narrative of the investigation into an offence, or the unjustified criticism of an investigation into an offence.

Observation fieldwork: *R v Sutherland*

In *R v Sutherland*, the accused was arraigned in the Dubbo District Court on one count of armed robbery while armed with an offensive weapon. The charges arose out of the robbery of a Woolworths store in the NSW town of Coonabarabran. During the robbery, the accused threatened a cashier with a knife and demanded that several packets of cigarettes be placed in a plastic shopping bag. The offence was captured by one of the store's CCTV cameras, which offered an aerial view of the serving area and showed both the cashier and the offender in the same image.

117 *R v Perese* [2001] NSWCCA 467, [13].
118 *R v Story* [2003] SADC 134; *Miller v The Queen* [2015] NSWCCA 206.

At the outset of the proceedings, the Crown Prosecutor indicated that he was seeking to lead recognition evidence from three witnesses. The first, a manager at the Woolworths store, knew the accused as the accused had been in a relationship with his niece. At the time of the offence, however, this witness had been working as a 'student police officer'. It was in this capacity that he had viewed the CCTV footage and recognised the offender. The second witness was a police officer who was asked to attend the police station to view the footage of the robbery as she had extensive knowledge of local residents of the area. Upon viewing the images of the robber, she recognised the accused. She had grown up with the accused and lived opposite him for a large part of her childhood. The third witness was a police officer who had been involved in the investigation of another offence to which the accused had pleaded guilty.

In addition to the recognition evidence, the Crown Prosecutor also sought to rely on coincidence evidence to prove identification. Prior to the robbery at Coonabarabran, the accused had entered a plea of guilty to a different armed robbery. This offence, at a Caltex Service Station in Tamworth, had also been captured by a CCTV camera. During the robbery, the accused had presented a knife and requested that cash be placed in a plastic bag. He had also requested that the cashier give him cigarettes (although this request was denied). During the robbery, the accused was dressed in clothing that appeared very similar to that worn by the robber of the Woolworths store in Coonabarabran. Finally, in respect of the issue of identification, the Crown Prosecutor also sought to lead expert evidence of identification from an image analyst who had enlarged, cropped and rotated the images of both robberies, transformed them into greyscale, and compared them for the purposes of identifying similarities between the people in the images.

This matter illustrates some of the potential complexities that can arise when attempting to apply *Smith* to matters involving multiple recognition witnesses and other evidence that is potentially probative of guilt. In this case, for example, two of the recognition witnesses were law enforcement officers who also knew the

accused in a personal capacity. Accordingly, while they were of the same occupation as the witnesses in *Smith*, the basis of their familiarity with the accused was fundamentally different. Further, one of the witnesses claimed to recognise the accused in the footage of the Woolworths robbery in large part due to his manner of walking. However, the accused can also be seen walking on the CCTV footage of the Tamworth robbery (to which he had entered a plea of guilty). Accordingly, many questions arise as to whether the footage of the Tamworth robbery places the members of the jury in the same position as the recognition witness when it comes to evaluating the accused's walk. How different is it to observe a person walking in reality as opposed to on a screen? How much would the answer to this question depend on the frame rate of the footage or the period of time the accused can be seen walking in the footage? Finally, could the coincidence evidence have any effect on the assessment of the relevance of the recognition evidence? For example, if a witness claimed to recognise the offender in both pieces of footage, would the fact that the witness was 'correct' in one recognition (in the sense that the accused later admitted his guilt in respect of the offence) influence any consideration of whether the witness was in a better position than the fact-finder to determine the issue of identity?

Determining relevance: The fact-finder's observations of the accused

As the case of *R v Sutherland* illustrates, the application of *Smith* in practice can be complex. One particular difficulty is that the judgment has had the unintended effect of making the relevance of recognition evidence based on CCTV images dependant on factors external to the brief of evidence, such as the length of proceedings, the location of proceedings, or the forensic decisions of the parties involved (such as the decision of the accused about whether or not to testify in his or her case). The following section explores these unintended effects and the case law seeking to address them.

The fact-finder's ability to observe the accused

Pursuant to *Smith*, to determine relevance it is necessary to compare the period of time the witness had spent observing the accused prior to testifying with the period of time the fact-finder will spend observing the accused prior to determining his or her verdict. This calculation helps to determine whether the data available to the witness and the fact-finder is the same (and if this is the case, the evidence will be irrelevant). However, as any criminal practitioner can attest, it is often notoriously difficult to predict the duration of a trial accurately. As a consequence, in theory, recognition evidence that has been ruled inadmissible at the outset of proceedings (on the basis that the proceedings were predicted to be lengthy) could become relevant if the duration of the trial was suddenly severely truncated (by, for example, the narrowing of the issues between the parties or decisions about the admissibility of lengthy items of evidence).

In a different but equally undesirable scenario, the relevance of recognition evidence from CCTV images may also depend upon the jurisdiction in which the offence is prosecuted. In their submission to the ALRC's 2005 inquiry into evidence law, some local court magistrates in NSW expressed concern about the judgment in *Smith*, noting that they were required to make factual determinations about the identity of the person depicted in CCTV images within a very short time frame.[119] They expressed the view that it was of assistance to hear evidence from police officers who were familiar with the appearance of the accused in these circumstances.[120] In response, the ALRC noted in its discussion paper that

> in a case before a magistrate or other judicial officer sitting alone and where the judicial officer will not have any great opportunity to observe the accused, opinion evidence of police officers as to identification could be considered as rationally affecting the

119 Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Uniform Evidence Law*, Report No 102 (2005), [9.16].

120 Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Review of the Uniform Evidence Acts*, Discussion Paper No 69 (2005), [8.18].

> probability that the accused is depicted in photographs before the court.[121]

The identity of the fact-finder may also affect the determination of the relevance of evidence. In its submission to the ALRC's 2005 evidence inquiry, the NSW ODPP noted that in one matter the defence had objected to the admissibility of recognition evidence from a police officer in a committal hearing in the local court. The issue in the matter was whether or not the accused had an earring. To resolve it, the magistrate was required to approach the accused in the dock to view him from close range in order to determine whether his ear was pierced. While the magistrate was able to do this, the ODPP submitted that the procedure would have been inappropriate in a jury trial. [122]

The approach in *Smith* may also result in the relevance of the recognition evidence being dependent on the design of a courtroom. If the dock in which the accused is seated is not clearly visible to all jurors or if its design affects the clarity of the jurors' view of the accused, the recognition evidence may be relevant, while the same piece of evidence would be irrelevant in different courtroom. In *R v Drollett*, it was noted that the trial judge had held that

> Some [of the accused] may be considered dangerous. The dock they are in is therefore a secure one behind glass except for a small opening. The distance from the jury box to the dock must be in the order of 15 metres. The idea that with these kinds of limitations the jury can be in as good a position to make identifications from the surveillance camera images borders upon the unreal (t 10).[123]

On the basis of the trial judge's observations, Simpson J held that the design of the courtroom 'affected the capacity of the jury to make the comparison between the appellant and the persons depicted on the footage. I do not think it could be said that the jury was in as good a position as Mr Stephens to make the

121 Ibid, [8.28].
122 New South Wales Office of the Director of Public Prosecutions, 'Response to the ALRC Discussion Paper 69 re the Evidence Acts' (16 September 2005).
123 *R v Drollett* [2005] NSWCCA 356, [48].

comparison. On that basis, I incline to the view that the evidence was relevant. It was capable of rationally affecting the jury's determination of a fact, indeed, the ultimate fact, in issue.'[124]

A myriad of other considerations may arise when attempting to determine whether the fact-finder is in the same position as the witness to arrive at conclusions about the identity of a person in a CCTV image. For example, if the CCTV image showed a close-up or distant view of the offender's face, would the relevance of the evidence depend on whether the witness had viewed the accused from these certain distances (therefore placing the witness in a better position than the jury to view the offender)? If the images showed the offender in poor lighting conditions, would the relevance of the evidence depend on the nature of the lighting in a courtroom? If the evidence were to be led by the defence that a person in a CCTV image was not the accused but another person altogether, would the relevance of the evidence depend on whether or not the other person had been called to give evidence?

It is important that the evidence against an accused can be assessed at an early opportunity to encourage the timely resolution of matters in the form of pleas or withdrawal of charges. Ideally, the parties to the proceedings should have access to all the evidence in order to identify the issues, formulate factual theories that satisfy the elements of the case[125] and analyse the party's prospects of success. To this end, it is important that the rules of evidence are clear so that issues of the admissibility of evidence can be evaluated at an early stage. Of course, the admissibility of evidence is not always self-evident, and may need to be determined prior to the commencement of proceedings. Generally, however, arguments about admissibility depend on the application of rules of evidence to past events. As such, they can be formulated and honed prior to the commencement of the proceedings. When issues of relevance depend on matters of practice and procedure, however, such as the duration of a trial or the precise courtroom in which a matter is heard, it is harder to determine whether there will

124 *R v Drollett* [2005] NSWCCA 356, [48].
125 Andrew Palmer, 'Why and How to Teach Proof' (2011) 33(3) *Sydney Law Review* 563.

be an issue with the admissibility of evidence in advance. In this way, the efficient preparation of criminal proceedings is impeded.

In addition, the current approach to the relevance of recognition evidence may also have an undesirable effect on investigative practices. For example, if the relevance of recognition evidence cannot be determined until the day the proceedings are listed for trial, it may be unclear to investigators whether the evidence should be gathered in the first place. For an abundance of caution, recognition evidence may be collected in every matter in case it becomes relevant on the day of the proceedings, with the consequence that witness statements may be taken and prepared unnecessarily and witnesses may be required to make themselves available to testify at short notice in case it is determined that their evidence is relevant. Alternatively, the evidence may not be gathered, and prosecutors may be uncertain about whether or not to requisition it from investigators after an initial screening of the brief of evidence. In this scenario, potentially probative evidence may not be collected at all, or may be gathered late in the prosecution process, thereby causing forensic problems for the accused due to the late disclosure of potentially relevant evidence.

Quality of the fact-finder's observation of the accused

The judgment in *Smith* also stipulates that the relevance of recognition evidence from CCTV images will depend on the whether or not it relates to aspects of the accused's appearance that would not be apparent to the fact-finder. One consequence of this approach is that recognition evidence based on CCTV images will be relevant if the accused's appearance has changed between the time of the offence and the time of the proceedings and the witness called to give the recognition evidence was familiar with the appearance of the accused at the time of the offence.[126] However, as the NSW ODPP has noted, the appearance of the accused is often unknown to the prosecutor prior to the first day of the trial. For

126 The judgment in Smith has been distinguished on this basis on a number of occasions: see eg *Neville v The Queen* [2004] WASCA 62; *R v Nguyen* [2006] NSWSC 834; *Murdoch v The Queen* [2007] NTCCA 1; *Nguyen v The Queen* [2007] NSWCCA 363; *Miller v The Queen* [2015] NSWCCA 206.

this reason, it is often difficult for prosecutors to attempt to determine the relevance of recognition evidence in advance. [127]

Another consequence of the requirement to assess the quality of the fact-finder's observation of the accused is that the relevance of recognition evidence may depend on whether or not the accused elects to give evidence in his or her case. It appears relatively clear that an accused who exercises his or her right to remain silent at trial cannot be requested to do anything by the prosecutor.[128] It is only during cross-examination that a prosecutor (or counsel for a co-accused) can ask an accused to do something in the nature of a courtroom experiment.[129] For example, the prosecutor may ask an accused to reveal a part of the body covered by clothing, provide a sample of handwriting, wear a hat, or to be tested 'on some idiosyncratic spoken or written reproduction of particular words'.[130] In cases involving CCTV evidence, the prosecutor may request that the accused perform a certain act, adopt a certain pose, wear a certain piece of clothing, or reveal an otherwise hidden part of his or her body if to do so would assist the fact-finder to determine the issue of identification. In *R v Kirby*, for example, the prosecutor invited the accused, during cross-examination, to wear an Akubra hat that had been found at his home (and which was similar in appearance to the hat worn by the offender on the CCTV footage), to turn his head sideways, and to pull the brim of the hat down. The jury were then given copies of still CCTV images of the offender and invited to compare them to the appellant (at which point one juror asked the appellant to tilt his head down).[131]

After the High Court's judgment in *Evans v The Queen,* it is strongly arguable that prosecutorial requests this nature will be considered relevant.[132] While no

127 New South Wales Office of the Director of Public Prosecutions, 'Response to the ALRC Discussion Paper 69 re the Evidence Acts' (16 September 2005).

128 Although in *R v Gray*, jury members were invited to compare stills from CCTV footage with the appellant who walked in front of the jury box for that purpose, despite not giving evidence in his own defence: *R v Gray* [2003] EWCA Crim 100.

129 *Evans v The Queen* [2007] HCA 59, [227]. See also Andrew L-T Choo, *Evidence* (Oxord, 3rd ed, 2012), 167.

130 *Evans v The Queen* [2007] HCA 59, [109].

131 *R v Kirby* [2000] NSWCCA 330, [39]–[51].

132 In Evans v The Queen [2007] HCA 59, Heydon J (Crennan J agreeing) and Kirby J held that the way in which the appellant looked in clothing recovered during a search of his

provisions of the *Evidence Act 1995* (NSW) govern prosecutorial requests that an accused demonstrate something to the fact-finder,[133] it is always possible that the evidence sought to be adduced through the demonstration could be excluded on the basis that it is unfairly prejudicial. However, case law demonstrates that judicial views on the prejudicial nature of the request could vary widely. In *Evans,* for example, Kirby J held that requiring the appellant to dress in clothing similar to that worn by the offender was '[d]angerous, unfair, humiliating and prejudicial' and that the evidence should have been excluded under ss 135 and 137.[134] Heydon J, on the other hand, held that there had been no unfair prejudice in the case.[135]

Accordingly, if an accused elects to give evidence, he or she may be requested to perform an act that 'goes to an issue about the presence or absence of some identifying feature other than one apparent from observing the accused on trial and the photograph which is said to depict the accused.'[136] In these cases, the courtroom experiment may affect the relevance of recognition evidence. For example, if a jury is permitted to observe an accused walking in front of them, would recognition evidence from a witness familiar with the accused's distinctive manner of walking remain relevant? Similarly, if a jury is permitted to inspect a tattoo or other distinctive feature about an accused's physical appearance that is not readily apparent when observing the accused in the courtroom, will recognition evidence from a witness familiar with this feature remain relevant?

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house, as well as the way he walked and talked, were all relevant as to whether he was the offender in the CCTV images: [101], [177], [180]-[181], [183]-[184] Gummow and Hayne did not agree that requiring the appellant to dress in the clothing would produce any relevant evidence (as the comparison between the items of clothing and the CCTV images could be made without dressing the appellant in the clothing) [26]. However, they agreed that requiring the appellant to walk in front of the jury and say particular words was relevant evidence [27].

133 In *Evans v The Queen*, [2007] HCA 79 all of the judges agreed that s 53 of the Act, which deals with 'experiments, demonstrations and experiments' (referred collectively in the title of the provision as 'views'), does not apply to in-court demonstrations (a result Kirby J described as 'awkward and arguably unintended'). It is less clear, however, whether requiring an accused to dress in particular clothing, walk in front of the jury and say particular words amounts to a demonstration or 'reconstruction' at common law, so as to be governed by the residual common law rules requiring that the it be a substantially similar reproduction of the relevant conduct or event: *Evans v The Queen* [2007] HCA 59, [63]-[64], [105], [109] (Kirby J); [30] (Gummow and Hayne JJ); [206], [218], [223], [226] (Heydon J, Crennan J agreeing).

134 Ibid, [108]–[109], [113] (Kirby J).

135 Ibid, [226] Heydon J.

136 *Smith v The Queen* [2001] HCA 50, [15].

The difficulties of adopting such an approach to the relevance of evidence are readily apparent. Despite the introduction of pre-trial disclosure requirements in indictable proceedings in NSW,[137] an accused is not required, at the outset of a trial, to indicate whether he or she will be giving evidence. Further, the prosecution or counsel for a co-accused is not required to indicate the nature of his or her planned cross-examination of the accused. However, it is precisely this information that is required in order to determine the relevance of recognition evidence. To require otherwise—to ask an accused to indicate whether he or she proposes to give evidence at the outset of a trial—could undermine the accused's ability to adopt a 'wait-and-see' approach to giving evidence or, alternatively, place undue pressure on him or her to give evidence in order to bolster the argument that recognition evidence sought to be adduced by the prosecution should be excluded on the basis that it is irrelevant.

An incomplete narrative

The application of *Smith* can also cause practical difficulties for the conduct of a criminal trial as a whole. The first of these is that exclusion of evidence pursuant to the ratio in *Smith* may leave a gap in the account of the investigation of the offence that is presented to the fact-finder. This may affect the narrative coherence of the prosecution's case theory, which in turn may affect its perceived plausibility. As Mary Brock and David Schnieder note, researchers have found 'a connection between structural ambiguity and juror scepticism', or in other words, 'a story that "hangs together" without gaps ... strikes an audience as more truthful than one with holes in it'.[138]

This was the situation in *R v Gibson*, one of the cases observed during research for this thesis. In *Gibson*, it was alleged that the accused had attempted to rob a

137 *Criminal Procedure Act 1986* (NSW) pt 3, div 3.

138 Mary Angela Bock and David Alan Schneider, 'The Voice of Lived Experience: Mobile Video Narratives in the Courtroom' (2016) *Information, Communication & Society, 3* <DOI: 10.1080/1369118X.2016.1168474>.

service station while armed with a baseball bat. The offence was captured by two CCTV cameras located in the service station. The offender was also seen entering and exiting the service station on footage captured by a third camera located outside the service station. The service station attendant contacted his local police station after the offence, and the officers who attended the scene of the crime viewed the CCTV images on the attendant's CCTV monitor. At this point, one or more of the officers recognised the person in the images. On the basis of this information, police attended the accused's place of residence, arriving at his apartment approximately 1.5 hours after the offence, at which point in time they located items which could be seen on the footage of the attempted robbery (namely, a distinctive jersey and a baseball bat).

The prosecutor invited two investigating police officers to read certain paragraphs of their statements during examination in chief.[139] The paragraphs were carefully selected so that any evidence about the fact that police had recognised the offender from the CCTV images was not revealed to the jury. Accordingly, the evidence presented to the jury was that police attended the service station and viewed the CCTV footage of the offence and then attended a unit in a particular apartment block. After the close of the evidence in the case, the jury sent the trial judge a note containing three questions, one of which was '[c]an you explain the circumstances of how the police knew to go straight to [accused's address]?' After a short discussion in the absence of the jury, the parties and the trial judge agreed that the jury should be told that the matter had not been canvassed in the evidence before them. As such, they were required to decide upon their verdict by reference only to the material before them and not to speculate about what other evidence may have been. In this case, the omission of the recognition evidence affected the coherence of the prosecution's narrative, leaving the jury with an obvious gap in the story of the events leading up to the accused's arrest.

Of course, the exclusion of evidence disclosing an accused's prior association with police is not unusual. However, in the majority of cases, this type of evidence is excluded at the request of the accused under s 137 of the Act on the

139 This practice is permitted pursuant to s 33 of the *Evidence Act 1995* (NSW).

basis that its probative value is outweighed by the danger of unfair prejudice to the accused. In contrast, in the case of recognition evidence, the accused has no forensic choice about whether or not to object to the admission of the evidence. As noted in *Smith*, the court has a duty to consider the relevance of the evidence being adduced and has no discretion to admit evidence that fails to satisfy the test of relevance. It is also not possible for the parties to waive the application of the relevance rule.[140] In some circumstances, however, it is conceivable that the accused may wish the recognition evidence to be adduced rather than excluded, particularly if the motive of the witness recognising the offender could be effectively challenged and undermined during cross-examination or, if the witness were a police officer, his or her prior familiarity with the accused did not disclose or imply any prior criminality. Tactically, admitting and rigorously challenging the recognition evidence may be more desirable than leaving a gap in the narrative of the investigation, from which a jury may infer that the accused was somehow known to police (despite the direction instructing the jury not to speculate about matters not in evidence before them).

Criticising the investigation

Another practical consequence of the judgment in *Smith* is that it may enable an accused to criticise the adequacy of the police investigation in a manner that does not promote the accuracy of fact-finding. In *Gibson*, for example, the police investigating the attempted armed robbery did not pursue a number of avenues of investigation after they had recognised the accused on the CCTV images and arrested him shortly after the offence. During cross-examination, the Officer in Charge was questioned, with some degree of rigour, about his failure to attempt to locate other witnesses to the offence (who could be seen on the CCTV footage) or to question any other people who resided in the same building as the accused about whether they saw, and could describe, the offender who fled the service station. In addition, the Officer in Charge was cross-examined about his failure to attempt to gather any other forensic evidence linking the accused to the offence,

140 *Evidence Act 1995* (NSW) s 190.

such as fingerprint evidence or DNA evidence. Is a result of the judgment in *Smith*, and the prosecutor's decision not to lead any recognition evidence, the police officer was unable to explain the reason for the limited investigation (namely, that other evidence pertaining to the accused's identity appeared superfluous in light of the fact that police recognised him from the CCTV images).

In his closing address, Counsel for the accused criticised the poor quality of the police investigation, noting that this was particularly surprising in light of the fact that the Officer in Charge had over 30 years of policing experience. Counsel for the accused also requested a direction be given to the jury pursuant to *Louizos v The Queen, R v Louizos*[141] (that is, a direction in the nature of a *Jones v Dunkel* direction that that the jury could draw an adverse inference from the Crown's failure to call evidence from other potential witnesses to the attempted robbery when it could have done so).[142] This request was denied by the trial judge, who noted that in *Mahmood v The State of Western Australia* the High Court had clarified that, in a criminal prosecution, the failure of the prosecution to call a witness should not affect the jury's ability to reach conclusions about issues of fact but rather was relevant to the question of whether the jury should entertain a reasonable doubt about the guilt of the accused.[143] However, the trial judge indicated that he was content to give a more limited direction relating to the absence of evidence. In his summing up he advised the jury not to speculate about the evidence that may have been given by other witnesses to the attempted armed robbery and informed the jury that, if they were of the view that the absence of any evidence in the matter was significant, they could take that into account when considering whether the Crown had proven its case beyond reasonable doubt.

The problems caused by *Smith* relating to the inaccurate portrayal of the nature and quality of an investigation may ultimately be resolved by further police education about the laws of evidence and the inadmissibility of much police recognition evidence. Nevertheless, it appears undesirable, and unfair to the

141 *Louizos v The Queen* [2009] NSWCCA 71.
142 *Jones v Dunkel* (1959) 101 CLR 298.
143 *Mahmood v Western Australia* [2008] HCA 1, [27].

investigating officers, to enable an investigation founded upon recognition evidence to be portrayed in a manner that implies that those involved in it were inept, lazy or were targeting the accused in an illegitimate manner. In addition, it appears undesirable that the jury may be directed that it can take the absence of evidence into account when determining whether the Crown has established the accused's guilt beyond reasonable doubt when the reason for the failure to adduce the evidence has been withheld from the jury.

Conclusion

It has been noted that 'the principles pertaining to admissibility are easy enough to enunciate but their application to potential evidentiary material will not always be so simple'.[144] This observation is particularly apposite when it comes to the issue of the relevance of recognition evidence based on CCTV images. In Australia, as elsewhere, the concept of relevance is fundamental, operating to tie the legal system 'to the bedrock of factual accuracy.'[145] However, currently, the relevance of much recognition evidence based on CCTV images is difficult to determine. This is primarily due to the High Court of Australia's judgment in *Smith v The Queen*, in which a majority of the Court held that the evidence of two police officers who claimed to recognise the accused in CCTV images of an armed robbery was irrelevant (and therefore inadmissible).

This chapter has engaged in a close analysis of *Smith*—its reasoning, its subsequent interpretation and consequences in practice. First, it argued that the factual conclusions in the majority judgment are brief and under-reasoned. Further, the majority judgment's application of the relevance provisions to the evidence is problematic, setting the benchmark of relevance too high for recognition evidence based on CCTV images and creating an undesirable overlap between the operation of the relevance and the opinion provisions. Second, this chapter explored the extant confusion about the meaning of the judgment. It

144 *R v Strawhorn* [2004] VSC, [36].

145 Ronald J Allen, 'Reforming the Law of Evidence of Tanzania (Part Three): The Foundations of the Law of Evidence and their Implications for Developing Countries' (2015) 33 *Boston University International Law Journal* 283, 286.

outlined how it has been misapplied on occasions, with the result that potentially relevant and probative recognition evidence has been incorrectly excluded, and demonstrated how the lack of guidance in the judgment has led to courts adopting inconsistent approaches to various factual scenarios. Finally, it analysed the potential consequences of *Smith* in practice, noting that the majority's reasoning has led to the issue of relevance being contingent on a number of factors external to the evidence, such as matters relating to criminal practice and procedure. The following chapter moves on to consider the difficulties that arise when *Smith* is distinguished and recognition evidence based on CCTV images is determined to be relevant.

4. IS THAT YOUR OPINION? RECOGNITION EVIDENCE AND THE OPINION RULE

Introduction

The rule of relevance, outlined in the previous chapter, implies that all evidence likely to assist in the legal resolution of a conflict will be placed before the fact-finder. In reality, however, this broad, inclusionary rule represents only the first threshold to admissibility, and is subject to many limitations and qualifications. Under both the common law and statute, these limitations and qualifications generally manifest as exclusionary rules [1]—that is, rules designed to prohibit the admission of certain items of evidence, either because they belong to a class of inadmissible evidence, or because to admit them would be contrary to a pre-determined policy of the law.[2] It is through exclusionary rules that the law of evidence asserts control over the information that is used to resolve a dispute, preventing reliance on that which is deemed to inherently unreliable or undesirable, as well as that which may interfere with the rational reasoning process of the fact-finder or prevent the efficient disposition of the proceedings.

Accordingly, it is not a necessary consequence that a piece of evidence that has passed the relevance test is admissible.[3] The evidence is also subject to the other exclusionary rules and may be excluded pursuant to one or more of them. One of the major exclusionary rules in evidence law is the 'opinion rule'. Although the exact formulation of the rule differs from jurisdiction to jurisdiction, it generally requires a witness to limit his or her testimony to facts based on personal knowledge and to refrain from attempting to *interpret* the facts. The rationale for the rule is that it is for the members of the jury to draw inferences from facts and

1 W S Holdsworth, *A History of English Law* (Methuen & Co Ltd, 1926) vol 9, 127.
2 William Twining, *Rethinking Evidence: Exploratory Essays* (Northwestern University Press, 1994), 189.
3 *R v Drollett* [2005] NSWCCA 356 [52].

to permit a witness to do so may have a number of undesirable consequences,[4] such as lengthening the trial, complicating the fact-finding process or inducing the fact-finder to defer unduly to the witness' opinion.[5]

As discussed in the previous chapter, recognition evidence based on CCTV images has failed the test of relevance on a number of occasions (pursuant to the judgment in *Smith v The Queen*).[6] However, in other cases, it has been held to be admissible. In these matters, the judgment in *Smith* has been distinguished, typically on the basis that the appearance of the accused has changed between the time of the offence and the time of the trial[7] or that the witness giving the recognition evidence is familiar with a feature of the accused that would not be apparent to the fact-finder (such as his or her walk).[8] Less commonly, the judgment has been distinguished on the basis that the witness has extensive prior knowledge of the appearance of the accused[9] or the images in question are of poor quality.[10]

In cases where recognition evidence based on CCTV images is relevant, it is necessary to determine whether any other exclusionary rules operate to render it inadmissible. This chapter draws on evidence law scholarship, case law and observation research to critically analyse the difficulties associated with applying the opinion rule and its exceptions to recognition evidence based on CCTV images. While Australian evidence law scholars have touched on some of the issues that are investigated below,[11] this chapter represents the first

4 Jeremy Gans and Andrew Palmer, *Uniform Evidence* (Oxford University Press, 2010), 134.
5 Ibid.
6 *Smith v The Queen* [2001] HCA 50.
7 *Neville v The Queen* [2004] WASCA 62; *R v Nguyen* [2006] NSWSC 834; *Murdoch v The Queen* [2007] NTCCA 1; *Nguyen v The Queen* [2007] NSWCCA 363; *Miller v The Queen* [2015] NSWCCA 206; *Western Australia v Bilos (No 2)* [2009] WASCA 2.
8 *Dair v Western Australia* [2008] WASCA 72, [166]; *Tasmania v Chatters* [2013] TASSC 61, [52]; *Li v The Queen* [2003] NSWCCA 290, [27].
9 *R v Marsh* [2005] NSWCCA 331, [18]; *Tasmania v Chatters* [2013] TASSC 61, [52]; *Nguyen v The Queen* [2007] NSWCCA 363; *Police v Murtagh* [2009] TASMC 5.
10 *Nguyen v The Queen* [2007] NSWCCA 363; *R v Sterling* [2014] NSWDC 199.
11 Gary Edmond and Mehera San Roque have examined the admission of recognition evidence under s 79 of the *Evidence Act 1995* (NSW): Gary Edmond and Mehera San Roque, 'Quasi-Justice: Ad Hoc Expertise and Identification Evidence' (2009) 33 *Criminal Law Journal* 8.

comprehensive and holistic examination of the application of the opinion rule under the *Evidence Act 1995* (NSW) to this type of evidence.

The chapter commences with a consideration of whether recognition evidence based on CCTV images should be classified as evidence of fact or opinion. Through an examination of published judgments, it argues that the proper categorisation of the evidence is at times overlooked by judicial officers and, when explicitly addressed, is not always determined on a principled basis. The chapter then examines whether recognition evidence that has been categorised as opinion evidence is admissible under one of the two main exceptions to the opinion rule—the exception for lay opinion or the exception for opinions based on specialised knowledge (a matter about which there is substantial judicial divergence). It argues that confusion about the appropriate exception to apply to this evidence is undesirable and has potentially serious ramifications, including the possible exclusion of relevant and probative evidence of identity. After analysing the history, purpose and framing of the provisions, the chapter argues that 'displaced identification evidence', or evidence that a witness recognises a person depicted in CCTV images, should be admitted pursuant to a revised exception to the opinion rule for lay opinion evidence.

The distinction between fact and opinion

The philosophical difficulty of distinguishing between fact and opinion evidence has long been apparent to evidence law scholars.[12] In the nineteenth century, renowned evidence law scholar James Bradley Thayer noted that, in one sense, 'all testimony to matters of fact is opinion evidence; ie it is conclusion from phenomena and mental impressions'.[13] In a similar vein, John Henry Wigmore noted that, upon close scrutiny, the distinction between fact and opinion vanishes and 'nearly everything which we choose to call "fact" either is or may be only

12 Ibid, fn 89.

13 James Bradley Thayer, *A Preliminary Treatise on Evidence at the Common Law* (Little, Brown, and Company, 1898), 524.

"opinion" or "inference"'.[14] More recently, during oral argument in the matter of *Honeysett v The Queen*, the Chief Justice of the High Court observed that as a matter of pure logic, 'everything we see is a matter of inference'.[15]

In its 1985 interim report on the laws of evidence, the ALRC acknowledged the artificiality of the distinction between evidence of fact and evidence of opinion. It observed that evidence tended to fall on a continuum, with evidence of fact at one end and evidence of opinion at the other, with 'the one at times passing imperceptibly in the other'.[16] Despite this, the Commission concluded that the distinction between fact and opinion evidence was both useful and unavoidable and that, '[f]or accuracy of fact finding and to minimise confusion and time-wasting ... it is necessary to exercise some control upon material at the opinion end of the continuum.'[17] For this reason, it recommended that the opinion rule, and its two major exceptions, be included in the Act.

Today, in uniform Evidence Act jurisdictions, the opinion rule is found in s 76(1) of the Act, which provides that '[e]vidence of an opinion is not admissible to prove the existence of a fact about the existence of which the opinion was expressed'. In order to determine whether evidence that a witness recognised a person depicted in CCTV images is caught by the opinion rule, it is first necessary to determine whether the evidence is fact or opinion evidence.

Recognition evidence: Fact or opinion?

The uniform Evidence Acts do not contain a definition of the term 'opinion evidence.' As such, courts have been required to draw from the common law in this area. Opinion has been defined at common law as an inference drawn from facts,[18] or a 'conclusion, usually judgmental or debatable, reasoned from facts'.[19]

14 John Henry Wigmore, *A Treatise on the System of Evidence in Trials at Common Law* (Little, Brown, and Company, 1905), [1919].
15 Transcript of Proceedings, *Honeysett v The Queen* [2014] HCATrans 121 (12 June 2014).
16 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [738].
17 Ibid, [738].
18 *Harrington-Smith v Western Australia (No 7)* [2003] FCA 893, [40].

The leading definition of 'opinion' adopted in evidence jurisprudence, however, is that originally propounded by John Henry Wigmore, who stated that an opinion was 'an inference drawn or to be drawn from observed and communicable data'.[20]

Despite the widespread judicial acceptance of this definition, it has proven to be of little utility when applied to identification evidence. Typically, evidence about the direct observation of a physical object is classified as evidence of fact.[21] For example, evidence that a car was a particular colour contains 'virtually no inference, synthesis, or opinion.'[22] As such, the risk of error is minimal, and the evidence can be accepted as the objective truth with a reasonable degree of confidence.[23] In contrast, although evidence of identity is based on a witness' direct observation of another person, it will always involve the drawing of an inference. Unlike a simple observation of a physical object, which is 'not capable of being broken down into further observable components',[24] a conclusion about identity rests on a vast amount of sensory data relating to a person's size, shape, physical attributes and mannerisms. Accordingly, identification evidence will always be the result of the witness' synthesis of information in order to draw an inference about identity.

Despite this, identification evidence is not always classified as opinion evidence. As Simpson J noted in *R v Leung and Wong*,

> The ordinary observer would regard evidence given by a man identifying his wife of thirty years as evidence of fact; but a witness who identifies a suspect in a police lineup would be perceived as giving evidence more closely allied to opinion evidence.[25]

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19 *RW Miller & Co Pty Ltd v Krupp (Aust) Pty Ltd* (1991) 34 NSWLR 129, cited in Ibid.

20 John Henry Wigmore, *A Treatise on the System of Evidence in Trials at Common Law* (Little, Brown, and Company, 1905), 75; *Allstate Life Insurance Co v Australia & New Zealand Banking Group Ltd (No 5)* (1996) 64 FCR 73; *Lithgow City Council v Jackson* [2011] HCA 36, [10]; *Honeysett v The Queen* [2014] HCA 29 [21].

21 Herbert W Titus, 'Statement of Fact Versus Statement of Opinion—A Spurious Dispute in Fair Comment' (1962) 15(4) *Vanderbilt Law Review* 1203, 1222.

22 Frederick F Schauer, 'Language, Truth and the First Amendment: An Essay in Memory of Harry Canter' (1978) 64(2) *Virginia Law Review* 263, 278.

23 Ibid, 277.

24 Ibid, 278.

25 *R v Leung and Wong* [1999] NSWCCA 287, [43].

As her Honour's example illustrates, it is not the drawing of an inference, but the *risk of error* that operates to divide identification evidence into the category of 'fact' or 'opinion'. As a matter of logic, experience and common sense, the witness identifying a long-term spouse is unlikely to be wrong. On the other hand, the witness identifying a suspect from a line-up could very well be mistaken, regardless of the level of his or her certainty about the identification.

The difficulty with this approach, however, is that judicial views about the risk of error attached to recognition evidence based on CCTV images may differ markedly. This can be most clearly illustrated in the proceedings relating to the prosecution of Mundarra Smith in New South Wales.[26] At first instance, the trial judge was willing to assume (for the purposes of argument) that that the evidence of two police officers who claimed to recognise Smith in CCTV images was opinion evidence.[27] On appeal, however, the NSW Court of Criminal Appeal unanimously held that the evidence was evidence of fact. In this regard, Sheller JA noted that

> to a witness who knows a person well enough to recognise that person on sight, there is no more inference involved in recognising that person as the person whose face is shown in a photograph than there is in recognising the same person when meeting that person in the street.[28]

While the majority in the High Court did not address the issue, Kirby J, in his dissenting judgment, held that the approach of the NSW Court of Criminal Appeal was erroneous, and that the evidence was opinion evidence. While he accepted that evidence from a witness who recognised their spouse from a clear studio photograph would be evidence of fact,[29] he noted that in other cases the accuracy of the act of recognition would be less certain. In light of this, and given that the opinion provisions of the Act were designed to promote the accuracy of fact-

26 The facts of this case are outlined in Chapter 3.
27 *R v Smith* [1999] NSWCCA 317, [11].
28 Ibid, [22].
29 *Smith v The Queen* [2001] HCA 50, [54].

finding, his Honour observed that it was 'unsurprising that identification evidence of the kind offered by the two police officers has normally been classified as opinion rather than factual evidence'.[30]

In several cases since *Smith*, the issue of whether recognition evidence based on CCTV images is fact or opinion evidence appears to have been completely overlooked. [31] In both *R v Li* and *Tasmania v Chatters*, for example, the judgment of *Smith* was clearly distinguished, but the question of whether the opinion rule applied to the recognition evidence in question was not explicitly decided. [32] The failure to consider whether evidence of recognition is evidence of fact or opinion is clearly undesirable. If classified as opinion evidence, the evidence is required to satisfy one of the exceptions to the opinion rule before it is admissible. Although the failure to explicitly consider the issue does not mean that the evidence has been incorrectly admitted, it would be useful to ensure clarity, consistency and certainty in the application of the laws of evidence for courts to address the issue in their oral or published judgments.

In cases where the issue has been considered, courts have arrived at different conclusions based on the factual circumstances of the case. In *R v Marsh*, for example, the NSW Court of Criminal Appeal concluded that witness' high degree of familiarity with the accused (her brother), was sufficient to render her evidence that of fact as opposed to opinion.[33] Similarly, in *R v Bilos*, the court held that that the witness' familiarity with the person in the CCTV images, combined with the fact that several of the images were of sufficient quality to enable the witness to identify him from the photographs, meant that the evidence was evidence of fact, not opinion.[34] In other cases, however, the evidence has been categorised as that

30 Ibid, [53]–[57].
31 *Neville v The Queen* [2004] WASCA 62, [35], [37]; *Police v Dorizzi* [2002] SASC 82 [31].
32 *Li v The Queen* [2003] NSWCCA 290, [104]–[106]; *Tasmania v Chatters* [2013] TASSC 61, [50]–[52]. In the latter case, it is implied but not explicitly stated that the evidence is opinion evidence admissible under s 79 of the Act. See also *Police v Dorizzi* [2002] SASC 82, [31]; *Neville v The Queen* [2004] WASCA 62, [35]–[37].
33 *R v Marsh* [2005] NSWCCA 331, [31].
34 *Western Australia v Bilos (No 2)* [2009] WASCA 2.

opinion.[35] In *R v Sterling*, for example, the trial judge held that the witnesses, who were corrections officers in Parklea Corrections Centre, 'did not have the degree of familiarity with the accused sufficient to categorise their evidence as evidence of fact rather than opinion'.[36]

The appropriate classification of recognition evidence based on CCTV images has received little academic attention. However, evidence law scholars Gary Edmond and Mehera San Roque have argued that the difficulty of delineating clearly between fact and opinion evidence means that 'practically, it makes sense to treat virtually all identification evidence as opinion evidence'.[37] However, it is undesirable to establish a default position whereby all evidence of identification, including evidence of recognition from CCTV images, is classified as opinion evidence. As Kirby J accepted in *Smith*, the indistinct boundary between fact and opinion evidence means that judges should be given 'wide latitude' when classifying the evidence.[38] The appropriate classification of the evidence is essentially a 'pragmatic question involving a consideration of whether it is desirable for the rules of evidence to exercise closer control over the admissibility of the assertion'.[39]

In the case of recognition evidence based on CCTV images, it is important that courts make the decision about the appropriate classification of the evidence on a principled basis. To this end, it is desirable that courts expressly consider the various factors that may, either singly or in combination, affect the risk of error in the recognition process. Of primary importance is the witness' familiarity with the person the witness claims to recognise. While courts generally recognise and discuss this factor, the above analysis of the case law indicates that they rarely consider other matters that may affect the accuracy of recognition evidence, such as

35 *R v Sterling* [2014] NSWDC 199; *Nguyen v The Queen* [2007] NSWCCA 363; *Miller v The Queen* [2015] NSWCCA 206; *Police v Murtagh* [2009] TASMC 5.
36 *R v Sterling* [2014] NSWDC 199, [57].
37 Gary Edmond and Mehera San Roque, 'Quasi-Justice: Ad Hoc Expertise and Identification Evidence' (2009) 33 *Criminal Law Journal* 8, 29.
38 *Smith v The Queen* [2001] HCA 50, [54] (Kirby J).
39 Jeremy Gans and Andrew Palmer, *Uniform Evidence* (Oxford University Press, 2010), 135.

> the quality of the photograph; the clarity of the lighting at the scene; whether there is a frontal, or sideways, or rear depiction of the features of the subject; the eyesight of the examiner; the length of time that the photograph is examined; external indicia of familiarity in the print; the degree of physiological or psychological arousal at the time of perception and so on.[40]

When the above matters are considered, and recognition evidence based on CCTV images is categorised as opinion evidence, it is then necessary to determine whether the evidence is caught by the opinion rule in s 76 of the Act.

Exceptions to the opinion rule

Like many of the exclusionary rules, the rule prohibiting the admission of evidence of opinion has exceptions. The two main exceptions, at both common law and under the *Evidence Act 1995* (NSW), are for lay (non-expert) opinion and opinions based on specialised knowledge (expert opinion).[41] When recognition evidence derived from CCTV images is relevant and falls into the category of opinion evidence, there is a substantial amount of judicial debate and confusion about which is the appropriate exception to consider when determining whether or not the evidence is admissible. The following section closely analyses the case law applying the two main statutory exceptions to the opinion rule in the *Evidence Act 1995* (NSW) to recognition evidence based on CCTV images. It identifies and analyses the points of divergence among judicial officers regarding the application of the exceptions and also notes the potential for overlap between the provisions. It then outlines the theoretical, academic and practical arguments for using each of the exceptions. It concludes by arguing that the most appropriate exception for this type of evidence is the exception for lay opinion evidence.

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40 *Smith v The Queen* [2001] HCA 50, [55] (Kirby J). See also *R v Drollett* [2005] NSWCCA 356, [43] (Simpson J).

41 Other exceptions are for evidence that is relevant otherwise than as opinion evidence (s 77) and evidence of an opinion expressed by a member of an Aboriginal or Torres Strait Islander group about traditional laws and customs of the group (s 78A).

The lay opinion exception

Developed at common law, the exception to the opinion rule for lay opinion evidence was designed to enable a witness to give evidence in the form of an opinion when it would be difficult to convey information about a matter effectively while referring only to facts. In other words, at common law a witness was permitted to give evidence in the form of an opinion when the facts upon which the opinion was based were 'so numerous and so evanescent that they couldn't be held in the memory and detailed to the jury precisely as they appeared to the witness at the time'.[42] This exception to the opinion rule was utilised regularly to enable witnesses to state opinions about a non-exhaustive list of matters including 'age, sobriety, speed, time, distance, weather, handwriting, identity, bodily health and emotional state.'[43] In its interim report on evidence, the ALRC noted that the lay opinion exception to the opinion rule was important as without it there was a risk that potentially probative evidence would not be communicated to the fact-finder.[44]

As noted above, an exception for lay opinion evidence also exists in the *Evidence Act 1995* (NSW). Section 78 of the Act provides that:

> The opinion rule does not apply to evidence of an opinion expressed by a person if:
>
> (a) the opinion is based on what the person saw, heard or otherwise perceived about a matter or event, and
> (b) evidence of the opinion is necessary to obtain an adequate account or understanding of the person's perception of the matter or event.

42 *Sydleman v Beckwith* 43 Conn 9 at 12-14 (1875), quoted in John Henry Wigmore, *A Treatise on the System of Evidence in Trials at Common Law* (Little, Brown, and Company, 1905), [1918].

43 Ibid, [1917]; *Connex Group Australia Pty Ltd v Butt* [2004] NSWSC 379; *R v Graat* [1982] 2 SCR 819.

44 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [734].

Despite its apparent clarity, it has been noted that s 78 conceals many problems.[45] For the most part, the requirements of the provision are easy to satisfy when considering the admissibility of recognition evidence based on CCTV images. For example, there is little doubt that the opinion about identity will be based on what the witness 'saw, heard or otherwise perceived'. As noted in *R v Klobucar*, the focus of s 78(a) is on what a witness perceived using his or her senses (as opposed to rational thought or legal analysis),[46] and the analysis of CCTV images relies primarily on visual (and occasionally aural) perception. There is also little doubt that evidence of the opinion will be necessary to obtain an adequate account or understanding of the witness' perception pursuant to s 78(b) of the Act.[47] In the vast majority of cases, it will be difficult, if not impossible, for a witness to pinpoint and accurately describe the multitude of facts which, taken in combination, form the basis of his or her opinion about identity.

There is, however, some confusion about whether the opinion can be said to be about the witness' perception of a 'matter or event'. The phrase 'matter or event' is not defined for the purposes of the provision and is not used elsewhere in the Act. Further, it was not defined or explained by the ALRC in its reports on evidence that led to the enactment of the Act.[48] In a number of cases involving positive identification evidence or recognition evidence based on recorded material (both visual and audio), courts have grappled with the question of what constitutes the 'matter or event' for the purposes of s 78.[49]

The first judicial consideration of the issue occurred in *R v Leung and Wong*.[50] *Leung and Wong* concerned an investigation into the importation of heroin into Australia contrary to the *Customs Act 1901* (Cth). During the investigation,

45 *Lithgow City Council v Jackson* [2011] HCA 36, [24] (French CJ, Heydon and Bell JJ).
46 *R v Klobucar* [2013] ACTSC 118, [88].
47 *Nguyen v The Queen* [2007] NSWCCA 363, [29].
48 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985); Australian Law Reform Commission, *Evidence*, Report No 38 (1987).
49 However, note that *R v Poile*, the Supreme Court of the Australian Capital Territory did not consider the terms of the provision at all and simply held that a witness' recognition evidence was 'lay opinion evidence that does not have the benefit of any exception under the Evidence Act 2011 (ACT) and should therefore be excluded': *R v Poile* [2016] ACTSC 262, [51].
50 *R v Leung and Wong* [1999] NSWCCA 287.

members of the Australian Federal Police (AFP) placed a listening device in the garage of a house in Cherrybrook, New South Wales. The device recorded an incriminating conversation, conducted in different Chinese languages, between a number of unknown offenders. Investigators engaged an interpreter to listen to the audio recording of the conversation and translate its contents. The interpreter also compared the voices on the recording with the voices of two men charged with offences arising out of the investigation (their voices were recorded during post-arrest conversations with AFP agents). He concluded that the men who had been charged with the offence had been in the garage and identified their voices on the recording of the conversation.

The defence objected to the admission of this evidence on the basis that it was lay opinion evidence that was not admissible under the s 78 exception. On appeal, Simpson J agreed with this submission. Employing rather complex reasoning, her Honour held that the relevant 'matter' was the identity of the people speaking in the incriminating conversations.[51] The interpreter, therefore, had not perceived anything about the matter until the point in time in which he formed his opinion about the identity of the speakers. In other words, '[w]ithout his opinion, there was no "matter or event" perceived by him, understanding of which would be facilitated by his evidence. His opinion was the primary, not the incidental, evidence'.[52] Unfortunately, the issue did not receive further scrutiny in *Leung and Wong*, with Spigelman CJ and Sperling J reserving their opinions about the scope and effect of s 78 of the Act in the circumstances of the case.

The judgment in *Leung and Wong* has been subject to scholarly criticism. Anderson, Hunter and Williams argue that Simpson J's approach to the interpretation to s 78 is too narrow and would exclude evidence the provision was designed to admit, such as evidence that can only be conceived of and communicated in the form of an opinion.[53] They note that the approach also

51 Ibid, [32].
52 Ibid, [34].
53 Jill Anderson, Neal Williams and Louise Clegg, *The New Law of Evidence: Annotation and Commentary on the Uniform Evidence Acts* (Lexis Nexis Butterworths, 2nd ed, 2009), 244–255.

incorrectly required the 'matter or event' to be relevant to the proceedings, when it is the opinion evidence itself, not the material on which it is based, that must satisfy the threshold requirement of relevance under the Act.[54]

Justice Simpson's approach to the interpretation of the lay opinion exception in *Leung and Wong* has also been questioned by the courts. In *Kheir v The Queen*, the Victorian Court of Appeal expressed concern about the correctness of Simpson J's reasoning. In *Kheir*, the Court considered a similar fact scenario and held that a police officer's evidence about the identity of a person speaking on intercepted telephone conversations was admissible under both s 78 (and perhaps 79 of the Act). [55] In a unanimous judgment, the Court held that the 'matter' for the purpose of s 78(a) was 'the audio recordings of the telephone intercepts, the recordings of the applicant's record of interview and a comparison of the two.'[56]

In *Smith v The Queen,* Kirby J took another approach to the interpretation of s 78, holding that the term 'matter or event' in that case referred to the offence in question (namely, the armed robbery). As each police officer formed his opinion after viewing CCTV images of the offence, and not the robbery itself, the opinion was not based on the witnesses perception of the 'matter or event' and was 'nothing more than a lay opinion upon a subject about which the jury were required to form their own opinion'.[57] This approach was followed in the Magistrates Court of Tasmania in *Police v Murtagh.*[58] In this matter, the evidence of a police officer who had known the accused for 11 years and who claimed to recognise him as the offender depicted in CCTV footage was held to be inadmissible under s 78 because it was based on his perception of surveillance footage and not the offence itself (the evidence was held to be admissible, however, under the s 79 exception for expert opinion evidence).[59] However, Odgers has criticised Kirby J's approach to the interpretation of s 78 as being too

54 Ibid. See also Stephen Odgers, *Uniform Evidence Law* (Thomson Reuters, 10th ed, 2010), [1.3.4180].
55 *Kheir v The Queen* [2014] VSCA 200, [68].
56 Ibid, [65].
57 *Smith v The Queen* [2001] HCA 50, [60]–[61] (Kirby J).
58 *Police v Murtagh* [2009] TASMC 5.
59 Ibid, [12].

narrow, noting that there is no express or implied requirement in the provision that the 'matter or event' also be a fact in issue. Nevertheless, in *Lithgow City Council v Jackson,* French CJ, Heydon and Bell JJ referred to Kirby J's analysis of s 78 in *Smith* with approval, before holding that s 78 only applied 'to opinions given by those who actually witnessed the event about which the opinion is given'[60]

A fourth approach to the interpretation of the term 'matter or event' was taken by the NSW Court of Criminal Appeal in *Nguyen v The Queen*.[61] In this case, police officers and a former girlfriend of one of the men accused of a committing a murder in a pool hall in Cabramatta were called to give evidence that they recognised the men involved in the shooting from CCTV images of the offence. The trial judge held that the recognition evidence was opinion evidence that was admissible pursuant to both ss 78 and 79 of the Act. When considering s 78, the trial judge held that there were two 'matters' for the purpose of s 78(a)—the 'real life appearance' of the accused and what was depicted in the recorded footage. This reasoning was upheld on appeal, with Smart AJ (with whom Mason P and Adams J agreed) noting that it would have been surprising if the trial judge had held that the evidence was *not* admissible pursuant to s 78.[62]

On the above authorities, therefore, it appears that the 'matter or event' in cases where recognition evidence is based on CCTV images could be classified as:

(i) the identity of the person whose image has been recorded (as per *Leung and Wong*);
(ii) the recording itself (as per *Kheir*);
(iii) the offence in question (as in *Smith*); or
(iv) both the appearance of the accused and the material depicted in the CCTV images (as in *Nguyen*).

60 *Lithgow City Council v Jackson* [2011] HCA 36, [41] (Crennan and Gummow JJ concurring).
61 *Nguyen v The Queen* [2007] NSWCCA 363.
62 Ibid, [31].

The different approaches to the interpretation of s 78 initially appear to be a cause of some concern. While the High Court noted the problem in the application for special leave to appeal against the judgment in *Kheir,* it did not consider the case to be a suitable vehicle for the question of whether s 78 (or s 79) applied to post-offence identification evidence based on an analysis of images or audio recordings.[63] Upon closer examination of the different approaches, however, it is arguable that they differ only slightly. In *Kheir* and *Nguyen*, it was essentially held that the 'matter or event' was contained *in* the relevant recording (the only difference being the way in which the contents of the recording were described). In *Leung and Wong* and *Smith*, on the other hand, the matter or event was considered to be external to the recorded images, being either the occurrence of the offence or the identity of the offender. The real point of difference in the case law, therefore, relates to the point in time in which the matter or event occurs and, as such, raises the policy question of whether or not the provision should be restricted to eye witness evidence.

In *Smith*, Kirby J argued that s 78 was 'addressed, essentially, to the opinion of eye-witnesses'.[64] As the police officers were not eyewitnesses to what could be seen in the CCTV images (which happened to be the actual offence), their opinions were not admissible pursuant to the provision. This, however, misinterprets the purpose of the lay opinion exception. In its interim report on evidence, the ALRC concluded that lay opinion evidence should be admitted when it would be of assistance to the fact-finder. In an attempt to delineate the circumstances in which it would be of such assistance, the ALRC concluded that the evidence should be based on the witness' personal perceptions of a matter or event. Evidence that was not based on a witness' personal perceptions of a matter or event would be 'mere uninformed speculation' and should be excluded.[65] The ALRC's report in this regard reflects the historical principle that was essential to

63 Transcript of Proceedings, *Kheir v The Queen* [2015] HCATrans 236 (11 September 2015).

64 *Smith v The Queen* [2001] HCA 50, [60] (Kirby J).

65 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [739]–[740].

the development of the modern opinion rule—namely, that 'the witness must speak as a knower, not merely a guesser'.[66]

The key issue, therefore, is that of personal perception, not temporal and physical proximity to the matter or event. It is the element of personal perception that distinguishes useful opinion evidence from mere guesswork. If a witness has formed an opinion about something that he or she saw, heard or otherwise perceived on a CCTV image and it is not possible for the witness to explain his or her perception without expressing an opinion, the evidence (provided it is relevant) will be of assistance to the fact-finder and should be admitted pursuant to s 78.

Further, if the drafters of the Act intended to limit lay opinion evidence to that of eyewitnesses, it is likely that they would have employed language similar to that used in the definition of 'identification evidence'. In the Act, 'identification evidence' is defined as an assertion by a person who was present 'at or near a place' where the offence was committed or an act connected to that offence was done.[67] The use of this language is unambiguous. It clearly limits identification evidence to eyewitness evidence. It is unlikely that the failure to employ similar language in s 78 of the Act was accidental, and from this it can be inferred that the provision was *not* intended to be limited to eyewitness evidence.

One final issue to note is that there is some concern about the effect that a broad interpretation of 'matter or event' would have on the admissibility of other types of opinion evidence. Edmond and San Roque argue that s 78 should be interpreted narrowly as it 'cannot have been intended to allow a range of temporally and spatially displaced viewers and listeners (lay and expert) to express opinions about evidence in ways that are not countenanced by s 79'.[68] The authors are concerned that permitting a witness who was not an eyewitness to give opinion

66 John Henry Wigmore, *A Treatise on the System of Evidence in Trials at Common Law* (Little, Brown, and Company, 1905), [1917].
67 *Evidence Act 1995* (NSW), dictionary.
68 Gary Edmond and Mehera San Roque, 'Quasi-Justice: Ad Hoc Expertise and Identification Evidence' (2009) 33 *Criminal Law Journal* 8, 26.

evidence under s 78 would enable 'anybody who has watched a video over and over .... to proffer his or her opinion at trial', [69] regardless of the fact that the opinion may not be based on 'specialised knowledge', as required by s 79 of the Act. While the issue of the interpretation of CCTV imagery generally is beyond the scope of this thesis, it may be briefly noted that the reform to the exception for lay opinion evidence that is suggested in this chapter may alleviate some of these concerns.

Opinions based on specialised knowledge

The second major exception to the opinion rule is that for 'expert evidence'. For centuries, civil and criminal proceedings have raised issues that are beyond the knowledge or understanding of the typical fact-finder. In order to facilitate the adjudication of the proceedings in which such matters were raised, courts permitted expert witnesses—that is, witnesses with the necessary knowledge, skill or experience to explain and interpret complex or technical matters—to draw inferences from accepted or hypothetical facts and to testify as to these inferences.[70] Expert evidence has increased in volume and complexity since the middle of the twentieth century[71] and today, expert evidence is regularly adduced in civil and criminal proceedings in all common law countries. Legal scholar Niamh Howlin has observed that the need for expert witnesses in modern litigation is ever-expanding, and notes that expert witnesses are now called to give evidence about 'scientific and technical matters, mental conditions, banking, finance, medicine, genealogy, engineering, handwriting, music, art, literature, professional and trade practices and standards, and foreign law.'[72] In fact, it has

69 Ibid.

70 An expert witness can also give evidence of facts that could be outside the fact-finders ordinary knowledge, such as the meaning of a foreign word or the answer to a complex mathematical calculation: J D Heydon, *Cross on Evidence* (LexisNexis Australia, online ed), [29020].

71 G L Davies, 'The Changing Face of Litigation' (1996) 6(3) *Journal of Judicial Administration* 179, 188.

72 Niamh Howlin, 'Special Juries: A Solution to the Expert Witness' (2004) 12 *Irish Student Law Review* 19, 19.

been observed 'the field of judicial investigation requiring the assistance of experts is illimitable'.[73]

The common law exception for expert opinion evidence is reflected in s 79 of the *Evidence Act 1995* (NSW). This provision provides that opinion evidence is admissible if (i) the witness has 'specialised knowledge' based on his or her training, study or experience; and (ii) the opinion in question is wholly or substantially based on that knowledge.[74] The term 'specialised knowledge' is not defined in the Act. However, it has been held that 'knowledge' is something more than subjective belief or unsupported speculation and is an 'acquaintance with facts, truths, or principles, as from study or investigation'.[75] The knowledge is 'specialised' if it is 'outside that of persons who have not by training, study or experience acquired an understanding of the subject matter'.[76]

There has been some judicial debate about whether identification evidence based on the post-offence analysis of recorded material is a form of expert opinion evidence. A number of courts have held that a witness who gives this type of evidence is an expert in a limited sense—that is, an 'ad hoc expert'.[77] At common law, an ad hoc expert is a person who has acquired a certain amount of expertise in the interpretation of a particular subject matter by virtue of repeated exposure to it over a relatively limited period of time. The concept was first recognised in cases dealing with the admissibility of transcripts of poor quality audio recordings that had been prepared by witnesses who had listened to the tapes repeatedly in order to decipher their content.[78] These witnesses were held to be 'ad hoc' experts and their evidence was admitted as a matter of judicial pragmatism. The alternative—requiring the jury to listen to lengthy tape recordings multiple times

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73 William L Foster, 'Expert Testimony—Prevalent Complaints and Proposed Remedies' (1897) 11 *Harvard Law Review* 169, 175.

74 *Evidence Act 1995* (NSW), s 79(1).

75 *Honeysett v The Queen* [2014] HCA 29, [23].

76 Ibid.

77 Gary Edmond and Mehera San Roque note that there is an inherent contradiction in this term: see Gary Edmond and Mehera San Roque, 'Quasi-Justice: Ad Hoc Expertise and Identification Evidence' (2009) 33 *Criminal Law Journal* 8, 8.

78 *R v Menzies* [1982] 1 NZLR 40; *R v Butera* [1987] HCA 58; *Eastman v The Queen* (1997) 76 FCR 9; *R v Cassar* [1999] NSWSC 436.

in order to attempt to understand their content—was considered undesirable as it would result in inordinate delay.[79]

In a series of cases, courts applying s 79 of the Act have held that it is wide enough to incorporate the common law notion of ad hoc expertise. The first judicial pronouncement to this effect is contained in *R v Leung and Wong*. In this case, Simpson J noted that opinion evidence about identity (for example, the evidence of an eyewitness who identified an offender from a police line-up) was frequently admitted into evidence despite the fact that the eyewitness had no specialist qualifications. She reasoned that it was the witness' specialised experience of the accused which qualified him or her to give the identification evidence, and that this was 'a familiar example of an ad hoc expert'.[80] She then noted that, '[f]or myself, I believe s 79 is sufficiently wide to accommodate the idea of an ad hoc expert.' Her Honour did not expand any further on this point and her judgment may be criticised for preserving the operation of the common law in respect of a section that was expressly intended to alter it.[81] However, it is unclear whether her Honour intended to propound the wholesale incorporation of the common law with respect to ad hoc expertise into the provision, or whether she was simply observing that its language was sufficiently broad to permit the admission of evidence of an opinion based on a limited amount of experience.

Gradually, the idea of the ad hoc expert was applied to enable the admission of voice identification evidence based on a comparison of audio recordings,[82] as well as evidence of similarities between images of an offender and an accused.[83] In *R v Drollett*, the concept of ad hoc expertise was extended beyond traditional identification evidence to recognition evidence based on CCTV images. In this case, Simpson J (with McClellan CJ at CL and Rothman J agreeing) stated the following (in obiter):

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79 See, eg, *R v Menzies* [1982] 1 NZLR 40.

80 *R v Leung and Wong* [1999] NSWCCA 287, [43].

81 *R v Panetta* (1997) 26 MVR 332, (Hunt CJ at CL). Compare the approach of the High Court to the first-hand hearsay exception in s 66 in *Papakosmas v The Queen* [1999] HCA 37, [10].

82 See, eg *Li v The Queen* [2003] NSWCCA 290.

83 *R v Tang* [2006] NSWCCA 167, [120].

> I would, tentatively, take the view that the concept of "ad hoc expert" is capable of including a person who has particular familiarity with another in such a way as to enable that person to give evidence identifying the other person by reference to photographic or video evidence.[84]

Since this date, the admissibility of recognition evidence derived from CCTV images as ad hoc expert evidence under s 79 has been affirmed in a number of cases. In *R v Marsh*, the court held that the recognition evidence in question was factual evidence but that, if it were wrong, s 79 was broad enough to encompass the concept of the ad hoc expert. The court then held that the witness, who had a significant amount of prior familiarity with the appellant, could be regarded as having 'specialised knowledge based upon experience, enlivening the application of s 79 of the Evidence Act.'[85] Likewise, in *Dodds v the Queen,* it was held that a co-accused was able to give evidence that he recognised the accused on the CCTV footage of a robbery as 'he had known the appellant for a couple of years before these events giving him the necessary familiarity with the appellant so that his evidence was either factual evidence or the opinion of an ad hoc expert'.[86] A similar approach has also been taken in two Tasmanian cases.[87]

In *Nguyen v The Queen*, however, the NSW Court of Criminal Appeal did not refer to the concept of ad hoc expertise, and instead simply held that police officers and the former girlfriend of one of the appellants had specialised knowledge of the appearance of the appellants based on their experience.[88] In the course of its discussion, the Court stated as follows:

> Turning to s 79 the judge held that Amee Duong had specialised knowledge concerning the appearance or identity of the four accused based on her extensive experience of them. The judge was correct in so

84 *R v Drollett* [2005] NSWCCA 356, [63].
85 *R v Marsh* [2005] NSWCCA 331, [32].
86 *Dodds v The Queen* [2009] NSWCCA 78, [87].
87 *Tasmania v Chatters* [2013] TASSC 61; *Police v Murtagh* [2009] TASMC 5.
88 *Nguyen v The Queen* [2007] NSWCCA 363, [33].

> holding. She had had extensive experience in observing each of the accused. Arguments to the contrary lacked substance. Amee Duong had specialised knowledge based on her experience of each of the accused.[89]

This approach, however, has not always been accepted by courts in uniform Evidence Act jurisdictions. In *Smith*, for example, Kirby J rejected, with limited explanation, the contention that the police officers' opinion evidence as to the identity of the robber depicted in the bank security photographs could amount to expert opinion evidence under the Act. He noted that the police officers did not claim to possess any expertise in anatomical or photographic comparisons and that their 'prior contact with the appellant did not amount to ad hoc expertise based on familiarity.'[90] In *R v Poile*, the Supreme Court of the Australian Capital Territory held that a recognition witness could not be an ad hoc expert because, unlike observations made by police officers, her observations were 'casual'. Accordingly, they were not comparable to 'those made by a person doing so as part of his occupation'.[91]

In addition, courts in Victoria have rejected the view that recognition evidence based on a post-offence analysis of recorded material could amount to expert evidence. In *Kheir v The Queen*, the Victorian Court of Appeal noted the NSW line of authority which held that this type of recognition evidence was admissible pursuant to s 79, but held that '[a]uthority in this jurisdiction establishes that voice recognition is not to be regarded as a field of expertise about which only experts may give evidence'. The court noted that

> The present case was not one in which an expert was asked to give an opinion on facts provided to him for that purpose. It is difficult to see how a scenario such as this one can be meaningfully distinguished from one of long-held personal familiarity with an individual's voice, such as might arise out of a friendship or a long-term neighbourly

89 Ibid, [60].
90 *Smith v The Queen* [2001] HCA 50, [59].
91 *R v Poile* [2016] ACTSC 262, [50].

> acquaintance. It is not, we think, correct to say that repeated exposure to the voice of a friend or neighbour makes a person an 'expert' in that voice.[92]

Finally, in *R v Sterling*, a trial judge in the District Court of NSW held that the evidence of a correctional services officer that he recognised the accused in CCTV footage of brawl that occurred in Parklea Corrections Centre was inadmissible under s 79 of the Act. In coming to this conclusion, her Honour Yehia J declined to follow Studdert J's view in *Marsh* that such evidence would be admissible as ad hoc expert opinion evidence on the basis that 'there was no analysis as to how the evidence ... satisfied the requirements of s 79 and in particular the concept of "knowledge" as contemplated by that section'.[93] Her Honour did not refer to the other NSW authorities discussed above, such as *Dodds v The Queen* and *Nguyen v The Queen*, which concluded that recognition evidence based on CCTV imagery was admissible under s 79 of the Act.

In holding that the recognition evidence was inadmissible under s 79, Yehia J noted that there was no evidence that the correctional services officer had the requisite 'knowledge' required by the section. While it was true that he compared the face of the accused to a photograph in a book twice a day during 'musters', there was no evidence that he had experience identifying inmates from CCTV footage (including no evidence of the methods that were used in any such past identifications, the quality of the footage on prior occasions or the accuracy of any such past identifications). Further, there was no evidence of how he took into account the 'blurriness, image distortion, shadows and other artefacts of the recording itself'.[94]

The approach to the admission of recognition evidence based on CCTV images in *Sterling* is narrow, requiring the witness to possess 'dual expertise'—that is, knowledge about both the appearance of the person *and* knowledge about the interpretation of the medium upon which the image of the person is depicted (be it

92 *Kheir v The Queen* [2014] VSCA 200, [66].
93 *R v Sterling* [2014] NSWDC 199.
94 Ibid, [78]–[80].

CCTV images, live television, recorded television, drone surveillance imagery, mobile telephone images or photographs). Given that it is highly unlikely that any witness who bases his or her opinion as to identity on prior familiarity with the accused will also have formal training or experience in making identifications from CCTV imagery, this approach would effectively halt the admission of any recognition evidence under s 79 that was based on eyewitness observation. To date, the judgment in *Sterling* has not been cited by any later cases and it is unclear whether the court's approach to the interpretation of s 79 will be followed.

It is arguable that the divergence of judicial views about the appropriate exception to apply to recognition evidence based on CCTV images is of little practical consequence if the evidence is ultimately admissible under one of the provisions. As Counsel for the Director of Public Prosecutions in Victoria argued in the High Court in the application for special leave to appeal in *Kheir v The Queen*, 'it does not matter which exception applies if there is an applicable exception—we say there is here one or the other or both—then the evidence is admissible'.[95] However, it is desirable to achieve certainty in this area for a number of reasons. First, it will enable advocates to prepare evidence more efficiently for a criminal prosecution by clarifying what requirements the evidence must meet in order to be admissible. Secondly, it will avoid the inefficient use of court resources which will occur if time is taken during proceedings to attempt to analyse the conflicting case law and debate the issue of which provision should be used and finally, it will ensure that fact-finders are given the same directions about the appropriate way to approach the evidence while deliberating on a verdict.

Blurred boundaries

As the above discussion demonstrates, there is considerable judicial confusion about whether relevant recognition evidence based on CCTV images is admissible pursuant to ss 78 or 79 of the Act. This can be mainly attributed to the lack of a definition of the words 'matter or event' in s 78 and the absence of any High

95 Transcript of Proceedings, *Kheir v The Queen* [2015] HCATrans 236 (11 September 2015).

Court authority on the issue of how the concept of ad hoc expertise interacts with s 79 of the Act.[96] In at least one case, however, confusion about the application of the exceptions to the opinion rule to recognition evidence based on CCTV images has manifested in the evidence being held to be admissible under *both* the lay and expert opinion exceptions in the Act.[97] In this way, the case law has highlighted an indistinct division between lay opinion evidence and expert opinion evidence.[98]

Evidence law scholars Anderson, Williams and Clegg have noted the existence of an overlap with respect of these provisions, and use the example of the admissibility of an opinion about the identity of a creator of a piece of handwriting to demonstrate the difficulty of determining whether certain opinion evidence is admissible pursuant to the lay opinion exception or the exception for opinions based on specialised knowledge.[99] It is arguable, however, that the difficulty of nominating the appropriate exception to apply exists not only in relation to handwriting evidence, but in relation to evidence falling into a much larger category—namely, opinion evidence that is based partly on what a witness perceives about a tangible item of evidence and partly on the witness' prior familiarity with a person. In these cases, the witness is asked to compare what he or she perceives from an analysis of the tangible evidence—be it handwriting, audio recordings or CCTV images—with his or her memory of the way in which a person looks, sounds, walks or talks. In these cases, it is only the witness' prior familiarity with a person that makes the admission of the evidence worthwhile and not superfluous, as the fact-finder is also in possession of the tangible item of evidence. This prior familiarity can be classified as a 'matter or event', so that the evidence falls within s 78, or as 'experience' of a person's appearance, so that the evidence falls within s 79.

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96 In *Honeysett,* the High Court held that it was not required to determine whether the evidence of an expert witness was admissible as 'ad hoc expert evidence', while in *Kheir* the High Court held that the case was not an appropriate vehicle to determine whether ss 78 or 79 apply to post-offence voice recognition evidence.

97 *R v Nguyen* [2006] NSWSC 834. See also Transcript of Proceedings, *Kheir v The Queen* [2015] HCATrans 236 (11 September 2015).

98 Jill Anderson, Neal Williams and Louise Clegg, *The New Law of Evidence: Annotation and Commentary on the Uniform Evidence Acts* (Lexis Nexis Butterworths, 2nd ed, 2009), [78.4].

99 Ibid.

Ideally, however, it is not desirable for one piece of evidence to be admissible under *both* ss 78 and 79 of the *Evidence Act 1995* (NSW). The two major exceptions to the opinion rule serve very different purposes. The exception for lay opinion evidence is intended to facilitate the admission of relevant evidence, generally of a non-technical nature, when it would otherwise be impossible to convey the evidence to the fact-finder adequately. In contrast, the exception for opinions based on specialised knowledge is designed to enable a witness who has acquired in-depth knowledge of a subject matter which would not generally be shared by the fact-finder to use that knowledge to form an opinion about accepted or hypothetical facts and to express that opinion when to do so would assist the fact-finder to resolve the issues in dispute. In order to streamline the preparation for litigation, reduce the occurrence or duration of arguments about the admissibility of evidence, and minimise appeals, it is important that there be clarity about which exception should be applied to post-offence recognition evidence.

The rules relating to the admission of lay and expert opinion evidence in other jurisdictions attempt to more clearly delineate between lay and expert opinion evidence. Rule 701 of the US Federal Rules of Evidence, for example, provides that lay opinion evidence is only admissible if, among other things, it is 'not based on scientific, technical, or other specialized knowledge within the scope of Rule 702'. Unfortunately, it is not clear how such an amendment would eliminate the difficulty of determining which exception is the most appropriate exception for recognition evidence based on CCTV images under the uniform Evidence Acts. The debate about whether prior familiarity with a person amounts to specialised knowledge based on experience would remain. Given the difficulty of legislating to delineate the appropriate scope and operation of the two major exceptions to the opinion rule, it is more desirable that there be an authoritative judicial pronouncement in Australia on the issue in Australia. Unfortunately, the High Court has not found it necessary to consider or determine the issue in any of the matters before it in which it has been raised.[100] The following section will

100 *Smith v The Queen* [2001] HCA 50; *Honeysett v The Queen* [2014] HCA 29; Transcript of Proceedings, *Kheir v The Queen* [2015] HCATrans 236 (11 September 2015).

consider which exception is the most appropriate to apply to recognition evidence based on CCTV images.

The preferable approach

The emerging judicial uncertainty about the application of the opinion rule and its exceptions to recognition derived from CCTV images has received little academic attention. However, Edmond and San Roque briefly addressed the issue in their exploration of the admissibility of identification evidence based on ad hoc expertise under the uniform Evidence Acts.[101] The authors argue that the type of evidence should be admitted pursuant to s 79 as the witness giving the opinion has 'specialised knowledge' (of a generally reliable nature) of the appearance of the accused based on their 'long and intimate "experience"'.[102] However, the fact that the authors place the word 'experience' in inverted commas when making this point highlights the fact that the wording of the provision makes it ill-suited to this form of evidence. It would be unusual, in everyday parlance, to assert that a person has 'expertise' with the appearance of another (as the Victorian Court of Appeal has noted in relation to voice recognition evidence).[103] As counsel for the appellant noted in oral argument in the *Smith*, 'it does not appear that [s 79] was ever designed to accommodate that sort of evidence'.[104] This is also the view taken in England, where the Court of Appeal has held that those who have specialised knowledge of a suspect that permits them to recognise the suspect's voice 'cannot properly in our view be referred to as experts'.[105]

In addition, the rules of practice and procedure that have developed to manage the use of expert evidence in criminal proceedings cast doubt on the suitability of the expert evidence exception for this type of evidence. For example, it is standard practice for an expert witness who is to be called in a criminal proceeding to

101 Gary Edmond and Mehera San Roque, 'Quasi-Justice: Ad Hoc Expertise and Identification Evidence' (2009) 33 *Criminal Law Journal* 8, 29.
102 Ibid.
103 *Kheir v The Queen* [2014] VSCA 200, [66].
104 Transcript of Proceedings, *Smith v The Queen* [2001] HCATrans 214 (25 May 2001) (Mr Byrne).
105 *R v Flynn* [2008] EWCA Crim 970, [14].

produce a report outlining the evidence that he or she proposes to give at the trial. Under the pre-trial disclosure provisions of the *Criminal Procedure Act 1985* (NSW), the prosecution is required to disclose its expert reports to the defence[106] and the defence may be ordered to do the same.[107]

Further, it has long been understood that expert witnesses are a special category of witness with an overriding duty to assist the court. At common law, an expert witness must assist the court by providing it with independent and impartial advice. In other words, the expert's opinion should be 'the independent product of the expert uninfluenced as to form or content by the exigencies of litigation'.[108] In NSW, the ethical duties of expert witnesses in civil proceedings are set out in the 'Expert Witness Code of Conduct' in schedule 7 of the *Uniform Civil Procedure Rules 2005* (the Code of Conduct). They include a general overriding duty to assist the court[109] and a duty to comply with the court's directions,[110] as well as a duty to work cooperatively with other expert witnesses and to exercise 'independent, professional judgment' when doing so.[111] The Code of Conduct also sets out material which the expert witness' report must include, such as the expert's qualifications, the facts and assumptions of fact on which the expert's opinion is based, the reasons for the expert's opinion, and, importantly, any qualifications on the reliability or accuracy of the expert's opinion.[112]

By virtue of the operation of pt 75, rule 3J of the *Supreme Court Rules 1970* (NSW), the ethical duties in the Code of Conduct apply to expert witnesses in criminal proceedings in the Supreme Court in NSW.[113] While the Code of Conduct does not expressly apply to expert witnesses called in criminal proceedings in the District Court, the NSW Law Reform Commission has noted that in practice experts in criminal proceedings in the District Court generally

106 *Criminal Procedure Act 1986* (NSW) s 142(h).
107 Ibid, s 143(2)(a).
108 *Whitehouse v Jordan* [1981] 1 ALL ER 267, 256–257.
109 *Uniform Civil Procedure Rules 2005* (NSW), sch 7, cl 2.
110 Ibid, sch 7, cll 3, 6.
111 Ibid, sch 7, cll 4, 6.
112 See Ibid, cl 5.
113 This is by virtue of the operation of Part 75, rule 3J of the *Supreme Court Rules 1970* (NSW).

agree to be bound by the Code. Accordingly, it has recommended that the *District Court Rules 1973* (NSW) be amended to make this a legislative requirement.[114]

Clearly, it is incongruent that a witness called to give evidence that he or she recognises a person in a CCTV image should be required to prepare an expert report, which may then be the subject of pre-trial disclosure orders, and to be required to comply with the Expert Witness Code of Conduct prior to being permitted to give his or her evidence. Further, the directions which are typically given in criminal proceedings when an expert witness has given opinion evidence (which focus on the reliability and accuracy of the material upon which the opinion was based and the level and degree of the witness' expertise) are not applicable to a witness who gives recognition evidence.[115]

In contrast, there are three arguments in favour of the proposition that recognition evidence based on CCTV images should be classified as lay opinion evidence and admitted pursuant to s 78 of the Act. First, this is consistent with the approach taken at common law. At common law, evidence of identity, including recognition evidence, is typically classified as 'non-expert' or lay opinion evidence.[116] In addition, other evidence of an analogous nature which involves a comparison of an item or thing with a witness' memory of a person, such as handwriting identification evidence, is classified as lay opinion evidence at common law.[117] The law reform commissions involved in the joint review of the uniform evidence laws in 2005 considered that recognition evidence based on CCTV images would be classified as lay opinion evidence.[118]

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114 New South Wales Law Reform Commission, *Jury Directions*, Discussion Paper No 16 (2012), rec 5.4(2).

115 See Judicial Commission of New South Wales, *Criminal Trial Courts Bench Book*, [2–1110].

116 *R v Murdoch* [2005] NTSC 78, [72]; *Lithgow City Council v Jackson* [2011] HCA 36, [45].

117 See, eg, *Duke v Duke* (1975) 123 SASR 106; *R v Mudgway* [2014] QDC 10; *R v Mazzone* (1985) SASR 330; *W v The Queen* [2006] TASSC 52.

118 Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Review of the Uniform Evidence Acts*, Discussion Paper No 69 (2005), [8.192].

Secondly, this approach is consistent with that taken under the Act for eyewitness identification evidence, including eyewitness recognition evidence. As Gans and Palmer note, eyewitness identification evidence is generally admitted pursuant to s 78 of the Act because when making the claim of identity or resemblance it 'will typically be necessary for a witness to communicate a memory of the defendant's appearance'.[119] This remains the same when the recognition is from CCTV images. While the matters observed on film may be distal in time and space, they are still matters that have been directly perceived by the witness, so as to make s 78 the more appropriate legislative avenue for admission. The quality of these images and what can be seen on these images goes to the weight of the evidence, as opposed to changing its inherent nature from lay to expert opinion evidence. This has been the approach taken by English courts to recognition from images, with courts holding that there is no distinction between eyewitness recognition evidence and recognition evidence from videotape.[120]

Finally, this approach is consistent with that taken in other jurisdictions with similar adversarial systems of justice and evidence laws. In the United States, for example, Rule 701 of the Federal Rules of Evidence, which governs the admission of opinion testimony by lay witnesses in US Federal Courts (and which has been adopted by a number of state courts), is the provision that is used to determine the admissibility of recognition evidence from CCTV images.[121] Similarly, the common law in Canada and England and Wales classifies recognition evidence from images as non-expert or lay opinion evidence,[122] while in New Zealand it is lay opinion under s 24 of the *Evidence Act 1996* (NZ).[123]

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119 Jeremy Gans and Andrew Palmer, *Uniform Evidence* (Oxford University Press, 2010), 258, [3.1.1].

120 See, eg, *R v Grimer* [1982] Crim LR 674; *Taylor v The Chief Constable of Cheshire* (1987) 84 Crim App R 191; *Attorney General's Reference No 2 of 2002* [2002] EWCA 2373.

121 See, eg, *United States v White* F 3d (7th Circ April 06, 2011); *United States v Shabbazz* 565 F 3d 280 (3d Cir April 16, 2009); *United States v Dixon* 413 F 3d 540 (6th Cir 2005); *United States v Pierce* 136 F 3d 770 (11th Cir 1998); *United States v Jackman* 48 F 3d 1 (1st Cir 1995); *United States v Allen* 787 F 2d 933 (4th Cir 1986).

122 *R v Anderson* 2005 BCSC 1346, [16]; Adrian Keane and Paul McKeown, *The Modern Law of Evidence* (Oxford University Press, 2012), 575.

123 *Harney v New Zealand Police* [2011] NZSC 107, [15].

It is important to note, however, that the application of the statutory lay opinion exception to post-offence recognition evidence is not entirely unproblematic. The following section examines the difficulty with the applying s 78 to displaced identification evidence and argues that reform is needed to ensure that it continues to fulfil its intended purpose.

Narrowing the exception

As discussed in the introduction, CCTV evidence is unique and compelling because it transcends the temporal and spatial restraints of most testimonial evidence. It provides a brief but extraordinary window into the past, placing the fact-finder in the position of an eyewitness to events related to criminal activity. In the case of recognition evidence based on CCTV images, both the witness and the fact-finder have access to the same material and what is shown in the vision forms part of the basis of the witness' opinion.

It has been noted, however, that the application of s 78 to an opinion that is based on material that is also available to the jury is potentially undesirable. Evidence law scholars Jeremy Gans and Andrew Palmer have observed that the way in which s 78 is framed 'makes it conceivable that witnesses will be able to state their views about evidence that is available to be directly observed by the fact-finder, merely because the evidence defies bare description'.[124] The authors argue, for example, that s 78 would enable any witness to give evidence about whether a painting, which could be viewed by the fact-finder, was counterfeit or whether a person accused of a crime looked guilty.[125] In the same way, s 78 as framed would currently enable a witness with no familiarity with the accused prior to his or her arrest (such as an investigating police officer) to give evidence that he or she recognised the accused as the offender when viewing the CCTV images. The evidence falls within the terms of the provision because it is based on what the witness 'saw heard or otherwise perceived' when watching the CCTV footage,

124 Jeremy Gans and Andrew Palmer, *Uniform Evidence* (Oxford University Press, 2010), 137.

125 Ibid.

and because identity is accepted to be a matter about which it is difficult to communicate effectively (and hence the evidence 'is necessary to obtain an adequate account or understanding' of the witness' perception).

There are several possible solutions to this problem. One already proposed in the case law is to construe the provision as applying only to opinions expressed by eyewitnesses (as noted above, this approach was adopted by Kirby J in *Smith* when he held that the term 'matter or event' in the provision referred to the robbery in question). However, as has already been observed, this approach would represent a divergence from the established common law position that recognition evidence, including recognition evidence based on CCTV images, is lay opinion evidence. Further, the approach represents an unduly narrow reading of the provision that is not warranted in light of the extraneous material available to assist in the interpretation of the provision—namely, the ALRC's reports into evidence law—or when the provision is compared to the definition of 'eyewitness identification', which evinces a clear legislative intention to limit the evidence to which the identification provisions of the Act are addressed to that of eyewitnesses. In addition, as Gans and Palmer note, this approach would exclude 'difficult-to-express accounts of circumstantial matters of potentially great relevance'.[126]

Gans and Palmer suggest that a better option is to exclude, as either irrelevant or prejudicial, opinions about perceived facts if the fact-finder 'has the same capacity as the opinion-holder to observe the evidence'.[127] These options, however, may not be ideal. The theoretical and practical difficulties that arise when recognition evidence derived from CCTV images is held to be irrelevant are discussed in the previous chapter. Further, it is problematic to rely on the discretionary and mandatory exclusion provisions in the Act to control the admission of opinion evidence that is based on factual material that is also available to the jury. While these provisions may enable a judicial officer to exclude the evidence if its probative value is outweighed (or substantially outweighed) by the danger that it

126 Ibid.
127 Ibid.

would be unfairly prejudicial, misleading or confusing, or a waste of time, to use them for this purpose could result in a lack of certainty about the admissibility of the evidence. One of the purposes of the *Evidence Act 1995* (NSW) is to ensure predictability about the admissibility of evidence 'so as to enable parties to prepare their cases for trial with reasonable confidence, and to be able to assess their prospects of success'.[128] To achieve this goal, a conscious decision was made by the ALRC in its reports that formed the basis of the Act to minimise the use of judicial discretions on questions about the admissibility of evidence, and to prefer rules over the use of such discretions.[129] Outlining the requirements for the admissibility of opinion evidence in the substantive provisions relating to the opinion rule in the Act assists in clarifying the law and ensures that it remains easy to understand and accessible to all.

An alternative and more desirable approach would be to amend the s 78 to make it a pre-condition of admissibility that the witness be in a better position than the fact-finder to draw inferences from the factual material. At the time s 78 was drafted, surveillance technologies were not as sophisticated and widespread as they are today. In particular, CCTV surveillance was in its infancy and it was relatively unusual to have a permanent visual record of an offender, an offence, or matters or events connected to the offence. As such, at the time the Act was drafted, it could be readily assumed that a witness giving lay opinion evidence would almost always be giving evidence of facts that were not available to be perceived by the fact-finder (whether as an eyewitness to an offence or a witness to a matter or event that provided circumstantial evidence against an accused). Accordingly, there was no requirement to explicitly require that the witness be in a better position to draw an inference from the facts because this was almost always the case.

Introducing such a requirement now would ensure that the provision is interpreted in a manner which is consistent with its purpose—to help the fact-finder by

128 Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Review of the Uniform Evidence Acts 1995*, Issues Paper No 28 (2004), [2.17].

129 Ibid, [2.26].

providing him or her with evidence of matters that have been perceived by a witness but that are difficult to communicate otherwise than in the form of an opinion. The primary rationale for the opinion rule is to exclude superfluous lay opinion evidence.[130] To admit non-essential evidence of an opinion—that is, evidence of an opinion where the fact-finder is in as good a position as the witness to draw the inference from the data—may undesirably prolong proceedings, unnecessarily confuse the fact-finder or encourage the fact-finder to defer to the opinion of one or more witnesses instead of forming his or her own opinion from the data.[131] Amending the provision to expressly note that the evidence must be of utility to the fact-finder would highlight this purpose and help to ensure that redundant evidence of low probative value is excluded from criminal proceedings.

A similar approach to the admission of lay opinion evidence has been taken in Canada, where the evidence is admissible if:

(i) the witness has personal knowledge of observed facts;
(ii) the witness is in a better position than the trier of fact to draw the inference;
(iii) the witness has the necessary experiential capacity to draw the inference, that is, form the opinion; and
(iv) the opinion is a compendious mode of speaking and the witness could not as accurately, adequately and with a reasonable facility describe the facts she or he is testifying about.[132]

It should be noted, however, that amending the provision in this manner does not eliminate the problems discussed in the previous chapter of determining whether the witness is in a better position than the fact-finder. These problems—such as attempting to determine how much time the fact-finder will spend in the accused's

130 John Henry Wigmore, *A Treatise on the System of Evidence in Trials at Common Law* (Little, Brown, and Company, 1905), [1917]–[1918].

131 John Henry Wigmore, *A Treatise on the System of Evidence in Trials at Common Law* (Little, Brown, and Company, 1905), [1918].

132 Alan W Bryant, Sidney N Lederman and Michell K Fuerst (eds), *Sopinka, Lederman & Bryant: The Law of Evidence in Canada* (LexisNexis Canada, 3rd ed, 2009), ch 12, pt 2, [12.14]. This text was cited with approval in *American Creek Resources Ltd v Teuton Resources Corporation* 2013 BCSC 1042.

presence or to ascertain the quality of the fact-finder's view of the accused in the courtroom—would remain under this redrafted provision. Accordingly, it is important that courts address and provide guidance about these matters in the case law. Ideally, to circumvent the uncertainty surrounding these factors relating to practice and procedure, the focus should be on the relative positions of the witness and the fact-finder at the commencement of the proceedings (as opposed to the time of the verdict). This approach enhances certainty about the application of the law of evidence by eliminating the effect of the vagaries of litigation on determinations about the admissibility of evidence. It also ensures that the focus remains on the utility of the witness' evidence rather than in attempts to compare and quantify the fact-finder's exposure to the accused.

Conclusion

In uniform Evidence Act and common law jurisdictions there is a growing body of case law distinguishing *Smith v The Queen*. In a number of published cases, evidence that a witness recognises a person from CCTV images has been held to be relevant under s 55 of the Act and it has been necessary to determine whether any other provisions of the Act operate to render it inadmissible.

This chapter has examined the application of a number of provisions of the Act, collectively referred to as the opinion provisions, to evidence of recognition based on CCTV images. The first difficulty revealed by the case law in this regard is whether the evidence should be classified as fact or opinion evidence. In some cases, courts have admitted recognition evidence without any consideration of the issue. The failure to classify the evidence as either fact or opinion evidence is clearly undesirable as it is possible that evidence which may be opinion evidence—and which may therefore be excluded unless it satisfies the necessary legislative preconditions to admissibility—is being admitted too freely.[133]

133 See also *Li v The Queen* [2003] NSWCCA 290 [104]–[106]. Further, in *Tasmania v Chatters* it was implied but not explicitly stated that the evidence is opinion evidence admissible under s 79 of the Act: *Tasmania v Chatters* [2013] TASSC 61 [50]–[52].

If recognition evidence based on CCTV images is classified as opinion evidence, it is prima facie inadmissible under the opinion rule in s 76 of the Act. It may, however, satisfy one of the two main exceptions to the opinion rule—the lay opinion exception in s 78 of the Act or the expert opinion exception in s 79 of the Act. In some cases, post-offence recognition evidence has been held to be inadmissible under both of the exceptions to the opinion rule.[134] This is cause for concern if, as the case of *Sterling* demonstrates, evidence which is probative (and which was often admitted at common law prior to the introduction of the *Evidence Act 1995* (NSW)) is being held to be inadmissible because the provisions do not adequately accommodate it.

In other cases, there is little judicial consensus about whether recognition evidence should be admitted under the exception for lay opinion or under the exception for opinions based on specialised knowledge. In some cases, it has been admitted pursuant to the lay opinion exception,[135] in others it has been admitted as 'ad hoc' or ordinary expert opinion evidence under s 79 of the Act[136] while, in a further category of cases, it has been held to be admissible under both of the provisions. The judicial debate and confusion about this issue reduces the predictability of the laws of evidence, which in turn affects the efficiency of the criminal justice system. If the interpretation of the provisions of the *Evidence Act 1995* (NSW) is uncertain, it is difficult for parties to prepare for litigation, and the chances of verdicts being appealed increases.[137]

The reason for the current incertitude is that the two major exceptions to the opinion rule, as drafted, do not easily accommodate recognition evidence from CCTV images. While in the majority of cases s 78(a) 'requires little discussion'[138], in the case of recognition evidence, there is difficulty determining

134 See, eg, *Smith v The Queen* [2001] HCA 50 (Kirby J). Further, while s 78 was not expressly discussed in R v Sterling, the evidence was held to be inadmissible: *R v Sterling* [2014] NSWDC 199.

135 *Nguyen v The Queen* [2007] NSWCCA 363; *Kheir v The Queen* [2014] VSCA 200.

136 *Police v Murtagh* [2009] TASMC 5; *Nguyen v The Queen* [2007] NSWCCA 363; *R v Drollett* [2005] NSWCCA 356; *R v Marsh* [2005] NSWCCA 331; *Dodds v The Queen* [2009] NSWCCA 78; *Tasmania v Chatters* [2013] TASSC 61.

137 Australian Law Reform Commission, *Evidence*, Report No 38 (1987), [28].

138 *Partington v The Queen* [2009] NSWCCA 232, [38].

whether or not the recognition evidence is based on what the witness perceived about 'a matter or event'. Further, there is ongoing debate about whether the category of 'ad hoc' expertise can be accommodated within s 79 of the Act. [139] In the event that the High Court ultimately concludes that the term 'matter or event' limits s 78 to eyewitness evidence, and that ad hoc expertise cannot be countenanced under the uniform Evidence Acts, recognition evidence from CCTV images may ultimately be held to be inadmissible under both ss 78 and 79 of the Act. This could result in a large amount of potentially probative evidence relating to an essential fact-in-issue—namely, identification—being withheld from the fact-finder in criminal proceedings.

This chapter has argued that the term 'matter or event' was intended to be construed broadly and as such should permit the admission of recognition evidence based on CCTV images (the 'matter or event' being whatever is depicted in the images). The provision does not then contain any inherent impediment to the admission of post-offence recognition evidence and, in light of the common law, the approach in other jurisdictions, and the approach to identification evidence in the uniform Evidence Acts, is the most appropriate exception to apply to the evidence. Nevertheless, the provision requires some amendment to deal adequately with the peculiar category of 'displaced identification evidence'. This chapter has argued that the provision should be amended to include a requirement that the witness be in a better position than the trier of fact to draw the inference from the facts before the evidence is admissible. This preserves the outcome desired by the High Court in *Smith* in effect—that is, it prevents the admission of superfluous opinion evidence of minimal probative value. However, framing the issue as a matter to be considered when determining the admissibility of lay opinion evidence circumvents some of the numerous problems that arise when it is considered when determining relevance under s 55 of the Act.[140]

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139 See, eg, Gary Edmond and Mehera San Roque, 'Quasi-Justice: Ad Hoc Expertise and Identification Evidence' (2009) 33 *Criminal Law Journal* 8; Gary Edmond, Kristy Martire and Mehera San Roque, 'Unsound Law: Issues with ('Expert') Voice Comparison Evidence' (2011) 35(1) *Melbourne University Law Review* 52.

140 These are outlined in the previous chapter.

While this and the preceding chapter have discussed difficulties relating to the admission of recognition evidence based on CCTV images under the *Evidence Act 1995* (NSW), the following chapter will discuss problems associated with the use of the evidence once it has passed both the relevance threshold and has not been excluded pursuant to the opinion rule.

5. RECOGNITION EVIDENCE, RELIABILITY AND THE RISK OF INJUSTICE

> We are good at familiar face recognition. Members of the public, witnesses or police who claim to recognise a person in a CCTV image or other context as someone they know should be taken very seriously ... But we are not perfect.[1]

Introduction

On 24 May 2007, a man wearing a mask that covered part of his face entered the Royal Bank of Scotland in Partick, Glasgow. Under the silent observation of the bank's CCTV cameras, he pointed a handgun at staff and customers and, in what was later described as a foreign or South African accent, demanded money. The bank tellers complied, and a short time later he left the bank with a sum of £8,216 in cash. Approximately two weeks later, 42-year-old William Mills was asleep in his apartment when he was woken by the sound of his partner calling '[t]hey've got guns, they've got guns.'[2] Wearing only boxer shorts, he opened his front door to 'a mass of black, people in black',[3] at which point he was thrown to the floor, handcuffed, and arrested for armed robbery.

After spending some time in remand, Mills was released on bail. Adamant that he was at home at the time of the offence, he pleaded not guilty to the charges at his trial. Evidence adduced at his trial pointed to his innocence. An expert concluded that the man in the CCTV images was shorter than Mills, and DNA found on a

1 Vicki Bruce, 'Familiar Face Recognition' in Caroline Wilkinson and Christopher Rynn (eds), *Craniofacial Identification* (Cambridge University Press, 2012) 1, 9.

2 'Wrongful Conviction Throws Spotlight on Unreliability of Witness Identification', *The Guardian* (online), 18 August 2009 <https://www.theguardian.com/uk/2009/aug/18/eyewitness-evidence-wrongful-conviction>.

3 Ibid.

door stop used by the offender to wedge the bank's door open did not match Mills' DNA profile. However, two police officers claimed to recognise Mills from CCTV images of the robbery, and two eyewitnesses gave evidence that they had selected him at an identification parade.[4]

At the conclusion of his trial, Mills was convicted. In May 2008, he was sentenced to nine years' imprisonment for armed robbery. Dumbfounded—*'I just couldn't believe it ... Even the prosecutor said he wasn't in the habit of prosecuting innocent men'*[5]—Mills continued to deny his guilt. At his lawyers' request, the DNA collected from the doorstop was checked against the profile of another prisoner, a South African named Michael Absalom who had been convicted of similar armed robberies in the same area. After the two profiles were found to match, Mills' conviction was quashed. In delivering the judgment of the Court of Appeal in Edinburgh, Lord Justice Gill noted that Mills' conviction 'stood or fell by eyewitness identification alone'[6] and that it was 'of concern that an important part of the case for the prosecution was the evidence of two police officers, neither eyewitnesses, who made positive statements that Mills was the robber on the basis of looking at CCTV stills'.[7]

As William Mills' ordeal demonstrates, recognition evidence based on CCTV imagery can contribute to a wrongful conviction. Taken alone or in combination with other evidence, it represents compelling proof of an accused's guilt. But how much weight should a fact-finder place on this type of evidence? What are its strengths and weaknesses, and how should it be assessed? Chapter three and chapter four examined potential barriers to the admissibility of recognition evidence based on CCTV images under the *Evidence Act 1995* (NSW)—the

4 Ibid.

5 "I couldn't believe it—I don't know how they came to a guilty verdict", *Herald Scotland* (online), 15 April 2009 <http://www.heraldscotland.com/news/12387044._apos_I_couldn_apos_t_believe_it____I_don_apos_t_know_how_they_came_to_a_guilty_verdict_apos_/>.

6 'Judges Quash Robbery Conviction', *BBC* (online), 9 April 2009 <http://news.bbc.co.uk/2/hi/uk_news/scotland/glasgow_and_west/7992062.stm>.

7 'Wrongful Conviction Throws Spotlight on Unreliability of Witness Identification', *The Guardian* (online), 18 August 2009 <https://www.theguardian.com/uk/2009/aug/18/eyewitness-evidence-wrongful-conviction>.

relevance rule and the opinion rule. This chapter examines the situation when, after the application of these two rules, the evidence is found to be admissible.

The chapter begins by outlining how recognition evidence is regulated by the *Evidence Act 1995* (NSW), noting how it falls outside the purview of existing legislative provisions when it is based on a post-offence analysis of images. It then draws upon psychological literature and case law to explore the factors that may affect the reliability of the evidence and make its probative value difficult to assess. Finally, it argues that recognition evidence based on CCTV images is sufficiently analogous to eyewitness identification evidence to justify further legislative regulation, and that existing policing, legislative and judicial responses to the evidence are inadequate to safeguard its integrity or assist the fact-finder to evaluate its probative value.

Recognition evidence and the *Evidence Act 1995* (NSW)

Eyewitness identification evidence[8] is often a vital component of the evidence adduced by the prosecution in a criminal proceeding. As a category or type of evidence, however, it is notoriously problematic. The experience of the criminal justice system has demonstrated, time and again, that it plays a significant role in the wrongful conviction of people accused of criminal offences.[9] It is true, of course, that it is generally difficult to determine with certainty whether a particular jury verdict is 'a reflection of the truth or a terrible mistake'.[10] However, the advent of post-conviction DNA testing and the establishment of independent bodies to review criminal convictions have increased our knowledge of the causes

8 Eyewitness identification evidence can take many forms and may include identification of a person from a line-up, a photographic array, a crowd, a single image, an image on social media or the news, or in a courtroom.

9 For some examples of wrongful convictions caused by mistaken eyewitness identification in England and the US, see Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [4.16].,

10 Keith A Findley, 'Learning From Our Mistakes: A Criminal Justice Commission to Study Wrongful Convictions' (2002) 38(2) *California Western Law Review* 333, 334; Samuel R Gross and Barbara O'Brien, 'Frequency and Predicators of False Conviction: Why We Know So Little, and New Data on Capital Cases' (2008) 5(4) *Journal of Empirical Legal Studies* 927, 928.

of wrongful convictions.[11] It is now clear that of the multiple possible causes of wrongful conviction,[12] eyewitness identification is the most significant. While estimates vary according to research design and focus,[13] the overwhelming message from the existing literature is that mistaken eyewitness identification is 'the most frequent single cause of wrongful convictions'.[14]

There is a voluminous body of Australian and overseas case law considering the problematic nature of traditional eyewitness identification evidence.[15] As Teague J observed in *R v Marijancevic*, the authorities are 'replete with references to concern about the otherwise unappreciated dangers or the seductive effect of cases of the later identification of a person previously unknown, but seen in a brief encounter'.[16] In contrast, the law has traditionally evinced much less concern for the admission and use of eyewitness recognition evidence. In *Davies v The King*, for example, the High Court observed that the danger of relying on the identification evidence of a witness who had only been shown one suspect prior to making his or her identification was significantly ameliorated when the suspect was known to the witness. In a joint judgment, the Court held that

> [i]t is almost unnecessary to say that the amount of care and the nature of the precautions which should be taken when a potential witness is

11 In the United States in 2005, there were 41 Innocence Projects in 31 states: Samuel R Gross et al, 'Exonerations in the United States 1989 through 2003' (2005) 95(2) *Journal of Criminal Law & Criminology* 523, 528.

12 These include false confessions, inaccurate scientific evidence, police misconduct and unreliable prison informer testimony: Samuel R Gross and Barbara O'Brien, 'Frequency and Predicators of False Conviction: Why We Know So Little, and New Data on Capital Cases' (2008) 5(4) *Journal of Empirical Legal Studies* 927, 932; Samuel R Gross et al, 'Exonerations in the United States 1989 through 2003' (2005) 95(2) *Journal of Criminal Law & Criminology* 523, 542; Brandon L Garrett, *Convicting the Innocent: Where Criminal Prosecutions Go Wrong* (Harvard University Press, 2011); The Innocence Project, *The Causes of Wrongful Conviction* <http://www.innocenceproject.org/causes-wrongful-conviction>.

13 See Special Master, Supreme Court of New Jersey, *State of New Jersey v Henderson: Report of the Special Master* (2008), 15–17.

14 Keith A Findley and Michael S Scott, 'The Multiple Dimensions of Tunnel Vision in Criminal Cases' (2006) 2 *Wisconsin Law Review* 291, 292. See also Samuel R Gross et al, 'Exonerations in the United States 1989 through 2003' (2005) 95(2) *Journal of Criminal Law & Criminology* 523, 544.

15 See, eg, *Davies v The King* [1937] HCA 27; *R v Turnbull* [1977] QB 224; *Domican v The Queen* [1992] HCA 13; *Festa v The Queen* [2001] HCA 72; *Alexander v The Queen* [1981] HCA 17.

16 *R v Marijancevic* [2011] VSCA 355.

> brought to identify an accused or suspected person must vary according to the familiarity of the witness with that person. It would be ridiculous … to deny the value or reliability of the identification if the witness' knowledge of the prisoner arose from long and close association or from every day intercourse in business affairs.[17]

Similar sentiments have been expressed in a number of other cases,[18] although the scientific basis for the commonsense assertion that recognition evidence is more reliable than positive identification is rarely judicially explored. In *R v Lovett*, however, the court did note that in cases where a witness recognised the offender, there was generally no need for the witness to engage in a formal identification procedure[19] (which, if conducted inappropriately, may result in an erroneous identification). Further, in *Trudgett,* the court noted that the displacement effect[20] and the rogue's gallery effect[21]—two psychological phenomena that may affect the reliability of identification evidence—are of no concern in the case of recognition evidence.

Despite the law's preference for eyewitness recognition evidence over traditional eyewitness identification evidence, it has been recognised that the former is not infallible. In its 1976 report on eyewitness identification evidence, the Devlin Committee referred to examples of cases in which recognition evidence relied upon to support a conviction was later shown to be erroneous.[22] Further, in *R v Turnbull*, the landmark English case on identification evidence, Lord Widgery

17 *Davies v The King* [1937] HCA 27.

18 See, eg *R v Lovett* [2006] VSCA 5; *R v Spero* [2006] VSCA 58; *R v Wright (No 2)* [1968] VR 174.

19 *R v Lovett* [2006] VSCA 5, [41].

20 The 'displacement effect' refers to the fact that a witness may sometimes retain the memory of a person seen in an image after the offence more clearly than the memory of the person seen at or around the time of an offence: see Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Uniform Evidence Law*, Report No 102 (2005), [13.60]; *Alexander v The Queen* [1981] HCA 17, [2] (Stephen J).

21 The 'rogue's gallery effect' refers to the fact that an image that implies that an accused has a criminal history may have a prejudicial effect on an eyewitness: Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Uniform Evidence Law*, Report No 102 (2005), [13.60]; *Alexander v The Queen* [1981] HCA 17, [2] (Stephen J).

22 Departmental Committee on Evidence of Identification in Criminal Cases, 'Report to the Secretary of State for the Home Department of the Departmental Committee on Evidence of Identification in Criminal Cases (Devlin Committee Report)' 1976), [4.11].

stated that 'a jury should be reminded that mistakes in recognition of close relatives and friends are sometimes made'.[23] The factors that the authorities have identified as affecting the reliability of recognition evidence generally relate to the opportunity the witness had to observe the event in question and include the length of time the witness spent viewing the offender, the viewing conditions, and whether or not the offender was disguised.[24]

In its 1985 interim report on evidence law, the ALRC reviewed the psychological literature on eyewitness identification evidence and the existing responses of the law to the potential unreliability of the evidence, after which it concluded that there was a need to exercise control over the evidence. It noted that, as a type of evidence, eyewitness identification evidence was 'at least as dangerous as hearsay evidence and evidence of bad character'.[25] Accordingly, it recommended that there be rules relating to the collection of the evidence,[26] as well as a statutory provision requiring a judge to warn the jury about its problematic nature.[27] It also recommended that experts be permitted to give guidance about the evidence in appropriate cases.[28] While the ALRC did not examine eyewitness recognition evidence in any detail, it did identify a number of miscarriages of justice that had occurred where witnesses claimed to recognise suspects.[29] The ALRC's recommendations were largely accepted and are now reflected in the provisions of the Act.

Admissibility

Identification evidence is dealt with in Part 3.9 of the Act. Sections 114 and 115 attempt to prevent unreliable identification evidence from being presented to the fact-finder by making certain investigative practices a pre-condition to

23 *R v Turnbull* [1977] QB 224, [25].
24 *R v Wright (No 2)* [1968] VR 174; *R v Lovett* [2006] VSCA 5, [41].
25 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [846].
26 Ibid, [833], [837].
27 Ibid, [840]–[843].
28 Ibid, [845].
29 Ibid, [416].

admissibility.[30] Section 114 provides that 'visual identification evidence' is not admissible unless: the accused was identified at an identification parade; and (ii) the witness who made the identification was not intentionally influenced to do so.[31] The evidence will still be admissible, however, if it would not have been reasonable to hold the parade or if the accused refused to take part in it.[32]

Section 115 deals with 'picture identification evidence', or evidence relating to an identification made by a witness after 'examining pictures kept for the use of police officers'. It provides that this evidence it is not admissible if the picture identification procedure occurred while the accused was in custody, unless: (i) the accused was offered an identification parade; (ii) the accused's appearance had changed between the time of the offence and the time he or she was taken into custody; or (iii) it would not have been reasonable to have held an identification parade.[33]

'Identification evidence' is defined in the Dictionary to the Act as follows:

> **"identification evidence"** means evidence that is:
> (a) an assertion by a person to the effect that a defendant was, or resembles (visually, aurally or otherwise) a person who was, present at or near a place where:
> (i) the offence for which the defendant is being prosecuted was committed, or
> (ii) an act connected to that offence was done,
> at or about the time at which the offence was committed or the act was done, being an assertion that is based wholly or partly on what the person making the assertion saw, heard or otherwise perceived at that place and time, or

30 Note that the *Evidence Act 2001* (Tas) does not contain these provisions.

31 Section 115 further regulates the admissibility of identification evidence by providing some limited restriction on the use of 'picture identification evidence', or evidence relating to an identification made wholly or partly by a witness after 'examining pictures kept for the use of police officers': *Evidence Act 1995* (NSW) s 115.

32 Ibid, s 114(2). Section 114(3) sets out a non-exhaustive list of matters to be considered when determining whether it was reasonable to hold an identification parade which include, among other things, the importance of the evidence and the relationship between the accused and the person making the identification: Ibid, s114(3)(b), (d).

33 Ibid, s 115(5).

(b) a report (whether oral or in writing) of such an assertion.

This 'very convoluted'[34] definition has been held to apply to eyewitness recognition evidence. In these cases, the evidence is based *partly* on what the witness perceived at the relevant place and time and *partly* on the witness' prior familiarity with the accused.[35] However, the definition does not apply to evidence that a witness recognised the accused after viewing CCTV images of an offence or an act connected to the offence.[36] While this evidence is 'an assertion by a person to the effect that a defendant was, or resembles (visually, aurally or otherwise) a person who was present at or near a place', it is not wholly or partly based on what the person 'saw, heard or otherwise perceived *at that place and time*'.[37] In other words, the fact that the witness is temporally and physically removed from the place where the offender was filmed ensures that the evidence does not fall within the definition of identification evidence. Accordingly, it is not a pre-condition for admissibility of the evidence that an identification parade was held prior to the act of recognition (or at least offered to the accused or determined to be unreasonable).

At this point, it is pertinent to note that the evidence also appears to be unregulated at the investigative stage. There is no published information that indicates that the NSW Police Force has a standard approach to the collection of recognition evidence based on CCTV images. In contrast, the NSW Police Force has published guidance about the appropriate procedures to be followed in the collection of eyewitness identification evidence. This guidance explicitly outlines the steps to be followed by a police officer when he or she conducts an identification parade, a photographic identification procedure or asks a witness to attempt to identify someone from a crowd.[38]

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34 Jeremy Gans and Andrew Palmer, *Uniform Evidence* (Oxford University Press, 2010), 255, [13.1.1].

35 *Trudgett v The Queen* [2008] NSWCCA 62, [68]; *Gardiner v The Queen* [2006] NSWCCA 190.

36 *R v Smith* [1999] NSWCCA 317; *R v Gee* [2000] NSWCCA 198, [38].

37 *Evidence Act 1995* (NSW) Dictionary, pt 1 (emphasis added).

38 New South Wales Police Force, *Procedures for the Evidence Act* (1998); New South Wales Police Force, *Code of Practice for CRIME (Custody, Rights, Investigation, Management and Evidence)* (2015 ed, 1998). Note that the *Crimes Act 1914* (Cth) also

Expert evidence

One way to attempt to ensure that the fact-finder approaches recognition evidence based on CCTV images with the appropriate degree of caution is to present them with expert evidence about the potential frailties of the evidence. In its 1985 interim report on evidence, the ALRC suggested that expert testimony could assist the fact-finder to evaluate eyewitness identification evidence, and noted that courts 'should not ignore the body of expert knowledge that has developed in this field over many years and should not lag behind developments in expertise in this area'.[39] The appropriateness of evidence of this nature, however, is a matter of some debate. Those who advocate for the admissibility of expert evidence about identification argue that it may improve the accuracy of verdicts by exposing common misconceptions about the evidence that are difficult to address in any other way. Those who oppose its admissibility argue that it unfairly undermines the credibility of eyewitnesses; unduly lengthens trials; and unnecessarily increases the cost of litigation (particularly given that cross-examination and jury directions provide adequate scope to address the potential frailties of the evidence).[40]

Although courts in Australia have typically been reluctant to admit such evidence,[41] current jurisprudence indicates that it may be admissible if it relates to general matters (such as human perception and memory) if warranted by the circumstances of a particular case.[42] It is not admissible, on the other hand, if it relates to the reliability of a particular witness' evidence.[43] Accordingly, the need for expert evidence to educate the jury about matters relating to the reliability of recognition evidence based on CCTV images must be assessed on a case-by-case

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contains guidance on the way in which to conduct identification procedures in federal investigations: *Crimes Act 1914* (Cth) ss 3ZM–3ZP.

39 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [825].

40 See Ian Freckelton, 'Admissibility of Expert Opinions on Eyewitness Evidence: International Perspectives' (2014) 21(6) *Psychiatry, Psychology and Law* 821, 822.

41 See, eg, *R v Smith* [1987] VR 907.

42 See, eg, *Gittany v The Queen* [2016] NSWCCA 182. See also Ian Freckelton, 'Admissibility of Expert Opinions on Eyewitness Evidence: International Perspectives' (2014) 21(6) *Psychiatry, Psychology and Law* 821, 822.

43 Ian Freckelton, 'Admissibility of Expert Opinions on Eyewitness Evidence: International Perspectives' (2014) 21(6) *Psychiatry, Psychology and Law* 821, 822.

basis. In appropriate cases—that is, cases where it appears that particular aspects of the act of recognition may have affected its reliability and the ability of the factors to influence the quality of the witness' evidence would be outside the knowledge of the fact-finder—the evidence could be admitted under s 79 of the Act (the exception to the opinion rule for expert evidence). In other cases, it may be excluded under s 135 of the Act on the basis that is misleading or confusing, or may result in an undue waste of time.

Judicial warnings

Section 116 of the *Evidence Act* imposes a mandatory obligation on a judge to inform the jury that there is a special need for caution before accepting identification evidence in all cases where its reliability it disputed.[44] While it does not require the judge to refer to the 'dangers' of convicting on identification evidence, it requires the judge to isolate and identify 'the reasons for the need for caution, both generally and in the circumstances of the case'.[45] Section 116(2) expressly states that it is not necessary to use any particular form of words to inform the jury of these matters, and it has been held that '[w]hen evidence is given that a person previously known to the witness was recognised the warning will be significantly confined'.[46] When eyewitness recognition evidence is led, the Judicial Commission of New South Wales's Criminal Trial Courts Bench Book has published the following suggested direction:

> In this case the evidence of [*name of witness*] is that [*he/she*] recognised someone that [*he/she*] knew. [*summarise circumstances if appropriate*] It is perhaps easier to understand the possibility of error when the evidence is given by someone who has not previously known [*the accused*], but errors may also occur even when the witness has previously known [*the accused*]. Mistakes have been known to be made by friends and even by relatives of a person who thought that it

44 *Dhanhoa v The Queen* [2003] HCA 40.
45 *Evidence Act 1995* (NSW) s 116(1)(b).
46 *Connelly v Allen* [2011] ACTSC 170, [159]; *Gardiner v The Queen* [2006] NSWCCA 190, [75].

> was their friend or relative whom they had seen. This is something you should bear in mind. Just because a witness claims to have known the person, there remains a possibility of mistake.

However, as recognition evidence based on CCTV images does not fall within the definition of 'identification evidence', there is no mandatory obligation on the judge to warn the jury of the special need for caution when considering it in accordance with s 116 of the Act. As such, the only safeguard that exists in respect of the admission or use of this type of evidence is the ability of a judge to warn a jury about the evidence pursuant to s 165 of the Act. Section 165 requires a judge to give a warning about the need for caution in determining whether to rely upon 'evidence of a kind that may be unreliable', including 'identification evidence'. A judge must give the warning if there is a jury and either party requests the warning,[47] unless there are good reasons for not doing so.[48] In *R v Rose,* the NSW Court of Criminal Appeal held that there was nothing to preclude a general unreliability warning under s165 being given with respect to visual identification evidence which fell outside the uniform Evidence Act definition of 'identification evidence'.[49] Accordingly, s 165 will apply to recognition evidence based on CCTV images.

Exclusion

If judicial directions are not able to reduce or eliminate the prejudicial effect of recognition evidence, it may be excluded under ss 135 or 137 of the *Evidence Act* if its probative value is outweighed by the danger of unfair prejudice to the accused. When applying s 137, which has been described as an 'evaluative judgment mandating exclusion',[50] the current position of the High Court of Australia is that a judge is not required to consider the credibility or reliability of

47 *Evidence Act 1995* (NSW) s 165(2).
48 Ibid, s 165(3).
49 *R v Rose* [2002] NSWCCA 455, [286], [293].
50 *IMM v The Queen* [2016] HCA 14, [16]. Note, however, that the judgment indicates that issues of credibility and reliability may be incorporated into an of the circumstances surrounding the evidence of the witness, which is then relevant to an evaluation of the probative value of the evidence.

the evidence, but rather is to proceed on the assumption that the evidence would be accepted by the jury.[51]

In a number of cases, applications have been made pursuant to s 137 to exclude recognition evidence based on a post-offence viewing of CCTV images. In the majority of these cases, the recognising witness has been a police officer.[52] As discussed in Chapter 2, police officers are increasingly gathering large amounts of CCTV imagery in their investigations. Often, after it is gathered, the images are circulated internally to other police officers. Given their occupation, police officers may be uniquely positioned to be familiar with the appearance of residents in their local area (as well as the appearance of people who have committed offences in the past). Accordingly, it is not unusual for police officers to claim to recognise an offender in CCTV footage or images.

The potential prejudice, however, is that the fact that a police officer has recognised a person in CCTV imagery may indicate that the person has a prior criminal record, or at least has had prior contact with the officer as a result of some involvement in criminal activity. It may also be extremely difficult to cross-examine a police witness as to why he or she was selected to view CCTV imagery of an offender, or to test his or her prior familiarity with the accused as such lines of inquiry will, on many occasions, reveal prejudicial material about the nature and extent of an accused's prior contact with police.[53] As Counsel argued at the trial of Mundarra Smith and Jason Nicholas, '[t]he more one seeks to probe the sufficiency of a basis for identification ... the more one gets into the rogues gallery effect'.[54] Further, as was noted in *Nguyen*, the nature and extent of the police officers' prior contact with the accused may raise other prejudicial inferences, such as the inference that the accused had no regular employment.[55]

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51 Ibid. The practical effects of this judgment are not yet clear, but for further discussion of its implications see: Stephen Odgers, *Implications of IMM v The Queen [2016] HCA 14* <http://inbrief.nswbar.asn.au/articles/search/The-implications-of-IMM>.

52 *R v Nguyen* [2006] NSWSC 834; *Police v Murtagh* [2009] TASMC 5; *Tasmania v Chatters* [2013] TASSC 61.

53 See, eg, the arguments made by the defence in *R v Cook* [1998] NTSC 125.

54 Transcript of Proceedings, *R v Smith* (District Court of New South Wales, Latham J, 31 August 1998).

55 *R v Nguyen* [2006] NSWSC 834.

As was foreshadowed by Kirby J in the hearing of the appeal in *Smith v The Queen*, in some instances, particularly in smaller regional areas, a police officer may acquire familiarity with an accused in the course of his or her personal life.[56] In *R v Sutherland,* for example, a case observed as research for this thesis and discussed in Chapter 3, one of the recognising police officers testified that she had grown up living next to the accused, and had seen him walking past her house as a child on numerous occasions over a period of ten years.[57] In cases such as this, the basis of the relationship between the witness and the accused can be safely explored during the trial proceedings. In other cases, the status of the witness as a police officer raises a distinct risk of prejudice. As Kirby J noted in the application for special leave to appeal in *Smith v The Queen*, 'it is a prejudice that is almost inherent in the role of police as guardians against criminality and the fact that that brings them into contact with the usual suspects, as it were.'[58] In some cases, it may be possible to limit the police officer's evidence so that the times and places of contact with the accused are revealed, but the reason for the contact is not explored.[59] Ultimately, however, the resolution of the question of exclusion under s 137 will largely depend 'on precisely what evidence is led as to the basis of [the police officer's] knowledge and familiarity, and how it was led'.[60]

The reliability of recognition evidence

As the above discussion illustrates, there are minimal legislative controls on the admission and use of recognition evidence based on CCTV images. If relevant and not excluded by the opinion rule, evidence of recognition derived from CCTV images is not subject to any further specific regulation under the uniform

56 Transcript of Proceedings, *Smith v The Queen* [2001] HCATrans 214 (25 May 2001).
57 *R v Sutherland*, (District Court of New South Wales, May 2015).
58 Transcript of Proceedings, *Smith v The Queen* [2000] HCATrans 551 (8 September 2000) (Kirby J).
59 *Tasmania v Chatters* [2013] TASSC 61. This approach was also taken at the trial of Mundarra Smith: Transcript of Proceedings, *R v Smith* (District Court of New South Wales, Latham J, 31 August 1998).
60 *Tasmania v Chatters* [2013] TASSC 61.

Evidence Acts.[61] It is not captured by the definition of 'identification evidence' and, as such, the provisions in Part 3.6 of the Act dealing with identification evidence do not operate to control its admissibility. Further, there are no safeguards at the investigative stage to attempt to ensure that the best quality recognition evidence is collected from witnesses who view post offence CCTV imagery of an offender. Judges do, of course, retain the discretionary power to exclude the evidence under ss 135 and 137 of the Act, and the admission of the evidence may attract a warning under s 165 of the Act (if a party to the proceedings requests such a warning). These potential safeguards, however, are ineffective if legal representatives and judges are unaware of the dangers of the evidence. The relatively new nature of recognition evidence based on images, combined with the scarcity of academic literature or case law examining its deficiencies, indicate that knowledge of its problematic nature may be sparse. Further, as the High Court confirmed in *IMM v The Queen*, the discretionary provisions offer judicial officers limited ability to scrutinise the credibility and reliability of evidence.[62]

To date, the lack of legislative safeguards in the uniform Evidence Acts has not been the subject of any sustained academic analysis or criticism. The first step in determining whether the situation is problematic or undesirable is to examine the nature of the evidence—its advantages and pitfalls. This section undertakes this task. It analyses whether recognition evidence based on CCTV images tends to be 'reliable'. In other words, is it accurate or trustworthy? [63] To do so, it draws heavily on cognitive and social psychological research into memory and

61 Note that while evidence of an out-of-court act of recognition is a prior representation, it will generally fall within the s 66 exception to the hearsay rule (criminal proceedings if maker available) or, alternatively, will not attract the operation of the hearsay rule at all (as it is not led to prove the truth of the assertion but rather the circumstances of the act of recognition): See *R v Gee* [2000] NSWCCA 198; *Director of Public Prosecutions v Nicholls* [2001] NSWSC 523, [27].

62 *IMM v The Queen* [2016] HCA 14.

63 It is noted that in scientific discourse the word 'reliability' has a distinct meaning and refers to 'whether the same results are obtained in each instance in which the test is performed': see Paul C Giannelli, Edward J Imwinkelried and Joseph L Peterson, 'Reference Guide on Forensic Identification Expertise' in Federal Judicial Centre and National Reseach Council of the National Academies (eds), *Reference Manual on Scientific Evidence* (3rd ed, 2011), 71–72. In this thesis, however, reliability is used to refer to the probability that the evidence is true: see Kevin Jon Heller, 'The Cognitive Psychology of Circumstantial Evidence' (2006–2007) 105(2) *Michigan Law Revew* 241.

perception. As legal scholars Roger Park and Michael Saks have noted, evidence law is greatly concerned with 'the abilities of witnesses to perceive, to remember, and to report what they have observed'[64] and, as such, psychology is perhaps 'the most important of the interdisciplinary threads that can be woven into evidence law.'[65]

There are, however, gaps and deficiencies in the existing psychological research in this area. Further, Richard Sherwin has noted, 'cognitive and cultural psychology, among other social scientific disciplines, cannot fully account for the way we experience visual images'.[66] In addition to psychological literature, therefore, this section also draws on case law to illustrate factors which, in the experience of the courts, have been identified as potentially affecting reliability of recognition evidence based on CCTV images.

Recognition evidence based on a first-hand encounter with a suspect

There is a prodigious amount of psychological research on eyewitness identification evidence. In 2008, it was observed that 'over two thousand studies on eyewitness memory have been published in a variety of professional journals over the past 30 years'.[67] The research, which includes basic research on vision and memory and applied research on eyewitness identification,[68] has identified a multitude of factors which may affect the accuracy of eyewitness identification evidence. These are often separated into two groups—estimator variables and system variables. Estimator variables are factors which cannot be altered, such as the nature of the offence or the age of the witness, while system variables, such as

64 Roger C Park and Michael J Saks, 'Evidence Scholarship Reconsidered: Results of the Interdisciplinary Turn' (2006) 47 *Boston College Law Review* 949, 957.
65 Ibid.
66 Richard K Sherwin, *Visualizing Law in the Age of the Digital Baroque: Arabesques and Entanglements* (Routledge, 2011), 48.
67 Special Master, Supreme Court of New Jersey, *State of New Jersey v Henderson: Report of the Special Master* (2008), 9.
68 National Reseach Council of the National Academies, *Identifying the Culprit: Assessing Eyewitness Identification* (National Acadmies Press, 2014), 1.

the type of identification procedure utilised, can be manipulated and controlled by those involved in the criminal justice system.[69]

In contrast to the situation in respect of eyewitness identification evidence, there is much less research on eyewitness *recognition* evidence. However, it is apparent that many of the estimator variables that affect the accuracy of eyewitness identification evidence will not apply to eyewitness recognition evidence. For example, there is no concern about 'cross-racial' or 'cross-ethnic' identifications when the person recognised is familiar to the witness.[70] Further, there is no concern about the quality of the witness' memory of the appearance of the offender deteriorating over time, or being contaminated by prior-retrieval or post-event information, as it is already firmly encoded.

Finally, as noted in *Lovett*, there is generally no need to conduct a formal identification procedure after the offence in cases where a witness recognises the offender. Accordingly, many of the concerns discussed in the literature surrounding identification parades are of no relevance to eyewitness identification evidence.[71] In the event that a formal identification procedure *is* conducted with an eyewitness who has recognised the offender at the time of the offence, there is little or no concern that the witness will be confused by a change in appearance of the offender between the time of the offence and the time of the identification, or that the witness will use the 'relative judgment process' to identify the person who looks most like the offender out of the selection of people in the line-up or photographic array.[72]

The fact that many of the difficulties relating to perception and memory that plague eyewitness identification evidence do not apply to recognition evidence

69 Gary L Wells and Elizabeth A Olson, 'Eyewitness Testimony' (2003) 54 *Annual Review of Psychology* 277, 279.

70 For a comprehensive discussion on cross-racial identification research, see Christian A Meissner and John C Brigham, 'Thirty Years of Investigating the Own-Race Bias in Memory for Faces: A Meta-Analytic Review' (2001) 7(1) *Psychology, Public Policy, and Law* 3.

71 *R v Lovett* [2006] VSCA 5.

72 Special Master, Supreme Court of New Jersey, *State of New Jersey v Henderson: Report of the Special Master* (2008), 22–23.

suggests that it will generally be more reliable than traditional identification evidence. This inference has been confirmed by psychological research, which has consistently demonstrated that people are remarkably good at recognising familiar faces. The face of a person that has been encountered a number of times in day-to-day life (in other words, a face seen for lengthy periods of time in different contexts and views) can usually be readily recognised despite variations in matters such as facial expression and viewpoint.[73] Precisely why humans are able to recognise familiar faces so well is still a matter of some debate. However, it is widely thought that different areas of the brain, or differing thought processes, are utilised when recognising familiar faces as opposed to attempting to match unfamiliar faces.[74]

Despite its advantages of traditional identification evidence, eyewitness recognition evidence is not infallible. The process of recognising a person involves three stages: (i) a comparison of the appearance of the person against a stored visual representation of the person; (ii) retrieval of information about why the person is familiar; and finally (iii) retrieval of the person's name.[75] Psychologist Vicki Bruce notes that problems can occur at any one of these stages so that, for example, a person may be erroneously recognised as familiar when compared to a stored memory, particularly if there is some resemblance between the person and the stored representation and the context in which the person is seen supports the inference that the person is familiar.[76] Alternatively, it may be impossible to remember why the person is familiar or a person may erroneously decide why a person is familiar. Finally, it may be impossible to retrieve the person's name from memory (or an incorrect name may be retrieved if it has been linked to the person in memory).[77]

73 Andrew W Young and Vicki Bruce, 'Understanding Person Perception' (2011) 102 *British Journal of Psychology* 959, 963; Robert A Johnston and Andrew J Edmonds, 'Familiar and Unfamiliar Face Recognition: A Review' (2009) 17(5) *Memory* 577, 582.

74 Vicki Bruce, 'Familiar Face Recognition' in Caroline Wilkinson and Christopher Rynn (eds), *Craniofacial Identification* (Cambridge University Press, 2012) 1, 2.

75 Ibid, 5.

76 Ibid, 6.

77 Ibid, 6–7.

Recognition evidence based on the post-offence viewing of CCTV images

Recognition evidence based on CCTV images has a number of advantages over recognition evidence based on a real-life encounter with an offender. In the first place, a witness who views CCTV images of an offence or an act related to an offence will be prepared to view the visual material. Accordingly, there will be no dispute about the witness' level of interest or attention at the time he or she observed the offender. Further, while high levels of stress can affect a witness' ability to accurately encode details of an event,[78] it is unlikely that a witness viewing a recording of a criminal offence will experience the same levels of anxiety as an eyewitness to an offence. The event being viewed is distal in both time and space and as such there is no immediate physical threat to the witness. Similarly, the 'weapon focus effect', or the reduction in the accuracy of the perception of details of an event when a weapon is present,[79] will also be non-existent (or at least significantly ameliorated) when a witness views CCTV images of an offence (again due to the fact that the event is remote and the weapon poses no actual threat to the witness). However, it is important to note that the emotional impact of viewing CCTV images in criminal prosecutions, and the effect any such impact has on the fact-finder's decision-making processes, has not yet been studied.

Another benefit of recognition evidence based on images is that the images can be viewed multiple times. Accordingly, the witness has a far greater capacity than an eyewitness to counteract any defects in his or her powers of observation (such as eyesight or hearing problems) and to overcome any distracting elements or 'noise' (such as objects or sounds) that may affect his or her visual processing at the time of recognition.[80] He or she also has far greater opportunity for prolonged observation of the offender than an eyewitness as he or she is able to pause or

78 Special Master, Supreme Court of New Jersey, *State of New Jersey v Henderson: Report of the Special Master* (2008), 42.

79 See, eg, Nancy Mehrkens Steblay, 'A Meta-Analytic Review of the Weapon Focus Effect' (1992) 16 *Law and Human Behaviour* 413.

80 National Research Council of the National Academy of Sciences, *Strengthening Forensic Science in the United States: A Path Forward* (National Academies Press, 2009), 32.

replay the footage, amplify any sound, and perhaps enlarge the image with the assistance of image processing software.

Finally, a significant advantage of recognition evidence based on CCTV images is that the images are generally available for scrutiny by the fact-finder. This is important given that studies have demonstrated that eyewitnesses are 'not particularly good at recalling conditions that may have impacted their attention; they tend to underestimate the distance between themselves and a target event and overestimate the duration of events and their ability to notice salient aspects or changes to their environment.[81] The fact that CCTV images will inevitably reveal some of the factors that may reduce the ability of the witness to recognise a person—such as the lighting, the person's attire, or the distance from the camera to the person being filmed—will assist the fact-finder to evaluate the witness' evidence.

On the other hand, as a type or category of evidence, recognition evidence based on CCTV images raises unique and distinct problems. While these problems have not received much judicial analysis in Australia, they were referred to by Kirby J in his dissenting judgment in *Smith v The Queen*. In this judgment, his Honour noted that even a person who was extremely familiar with the appearance of the accused, such as a relative, could make a mistake when the identification was from a photograph, and went on to observe that

> [T]he accuracy of such identification testimony may depend upon the quality of the photograph; the clarity of the lighting at the scene; whether there is a frontal, or sideways, or rear depiction of the features of the subject; the eyesight of the examiner; the length of time that the photograph is examined; external indicia of familiarity in the print; the degree of physiological or psychological arousal at the time of perception and so on. Most people have, at some stage in their lives, mistaken the identity of a person as a family member or someone they

81 Martine Powell, Maryanne Garry and Neil Brewer, 'Eyewitness Testimony' in Ian Freckelton and Hugh Selby (eds), *Expert Evidence* (Law Book Co, Online ed, 2016) [65.05], [65.320] (citations omitted).

> know well. How much greater is the chance of error in identification where it is done from a photograph and the photograph relied upon is not of a well-lit studio portrait of a close family member or friend (where testimony might properly be accorded the status of fact rather than opinion), but the somewhat imperfect representation in a bank security photograph of a scene where the subject of the photography is taking pains to disguise, or hide, his or her appearance.[82]

Factors that may affect the accuracy of the evidence

The following section examines these and other factors that may undermine the veracity or trustworthiness of recognition evidence when the person recognised is depicted in CCTV imagery. While some of these may enhance the reliability of the evidence, others may undermine the likelihood that it is accurate. In other instances, the precise effect of the factor on the veracity of the evidence remains uncertain.

The quality of the images

As noted in *Smith v The Queen*, the quality of the image is a factor to be considered when analysing the reliability of recognition evidence from CCTV images. In many of the cases dealing with post-offence recognition evidence, the quality of the images has been assessed and described as 'poor'. Produced by simple first generation CCTV surveillance systems, often with low frame rates and resolution, the images are grainy, blurry or otherwise difficult to interpret.[83] This situation is not unique to Australia. In 2007, the Home Office and Association of Chief Police Officers estimated that the quality of over 80% of images from CCTV systems that were supplied to police in the United Kingdom was 'far from ideal'.[84]

82 *Smith v The Queen* [2001] HCA 50, [55] (citations omitted).
83 See Chapter 1 for a discussion of CCTV surveillance systems.
84 Graeme Gerrard et al, 'National CCTV Strategy' Home Office, 2007.

It may be, however, that the quality of the photograph or footage is only of limited concern in the case of recognition from CCTV images. Psychological research has demonstrated that familiar face recognition remains accurate in difficult conditions. As early as 1973, Harmon showed that people were good at recognising familiar faces in pixellated images.[85] In 1999, Burton et al conducted an experiment which revealed that people were very good at recognising familiar individuals from poor quality surveillance footage. The authors showed that it was the information gathered from the depiction of the person's face (as opposed to the person's body or gait) which founded the basis for the recognition. They concluded that recognition of familiar faces was a flexible process that was 'capable of generalization over significant changes in image properties.'[86]

These findings have been replicated by other researchers, and in a series of experiments, Clutterbuck and Johnston demonstrated that a person's ability to match images of faces provided a strong indicator of the person's familiarity with the face.[87] Further, it has been shown that familiar faces can be readily recognised in images that have been distorted. In one experiment, Hole et al showed that 'familiar faces may be stretched up to twice their original height with no effect on the subjects' ability (or speed) to recognize them'.[88] It has been noted, however, that the different levels of accuracy in familiar face recognition and unfamiliar face recognition (which is discussed in the following chapter) is a phenomenon that 'is not well known outside the scientific community.'[89]

85 Leon D Harmon, 'The Recognition of Faces' (1973) 229(5) *Scientific American* 70.

86 A Mike Burton et al, 'Face Recognition in Poor-Quality Video: Evidence From Security Surveillance' (1999) 10(3) *Psychological Science* 243, 247.

87 Ruth Clutterbuck and Robert A Johnston, 'Exploring Levels of Face Familiarity by Using an Indirect Face-Matching Measure' (2002) 31(8) *Perception* 985; Ruth Clutterbuck and Robert A Johnston, 'Demonstrating the Acquired Familiarity of Faces by using a Gender-Decision Task' (2004) 33(2) *Perception* 159; Ruth Clutterbuck and Robert A Johnston, 'Demonstrating how Unfamiliar Faces become Familiar using a Face Matching Task' (2005) 17(1) *European Journal of Cognitive Psychology* 97.

88 Mike Burton, 'Why Has Research in Face Recognition Progressed So Slowly? The Importance of Variability' (2013) 66(8) *The Quarterly Journal of Experimental Psychology* 1467, 1473; Graham J Hole et al, 'Effects of Geometric Distortions on Face-Recognition Performance' (2002) 31(10) *Perception* 1221.

89 A Mike Burton and Rob Jenkins, 'Unfamiliar Face Perception' in Andrew J Calder et al (eds), *The Oxford Handbook of Face Perception* (Oxford University Press, 2011) 287, 302.

Still versus moving images

Another important factor when considering the reliability of recognition evidence from CCTV images is whether the images are still or part of a piece of moving footage. For example, a CCTV image that has been isolated from moving footage, or produced by a CCTV system with extremely slow frame rates, is essentially a photograph. For decades, the law has preferred identification evidence that is based on 'seeing persons in the flesh' as opposed to viewing images of the person. In *R v Alexander*, Stephen J observed that there were 'peculiar difficulties' involved in identification from photographs, which inevitably differed from 'nature' in light of their static, two-dimensional quality and the fact that there were often in black and white.[90] A similar point was made in *R v Clarke* when the court noted that '[a] photograph is only two dimensional, and it records what a person looked like in the one split second when that person may have been moving his or her features, but which in any event may not always provide a safe impression of what that person looks like when seen in the flesh'.[91] However, as discussed above, research has indicated that recognition of familiar faces from photographs is typically robust.

It is possible, however, that there may be further benefit if the images are not static and show more than 'one split second' of time. In one experiment, for example, Knight and Johnston found that motion facilitated the recognition of familiar faces presented in photographic negative. On the basis of this and other research, Johnston notes that '[w]hen viewing conditions are poor we may rely more on the idiosyncratic motion characteristics of the face and use them as cues to identity.'[92] It may be that viewing moving images better replicates the experience of recognising a person in real life, which 'begins with a glimpse at the overall shape of a person and builds towards more confident judgments as the particularities of the movements, body structure, and face are integrated and

90 *Alexander v The Queen* [1981] HCA 17, [2] (Stephen J).
91 *R v Clarke* (1997) 97 A Crim R 414.
92 Robert A Johnston and Andrew J Edmonds, 'Familiar and Unfamiliar Face Recognition: A Review' (2009) 17(5) *Memory* 577, 586.

processed'.[93] However, it has been observed that the available evidence about the recognition of people from static versus dynamic images is limited and that that further research is needed into the role of motion in the recognition of familiar people.[94]

The view of the offender in the footage

Another factor of potential significance when it comes to assessing the reliability of recognition evidence based on CCTV images relates to the view of the offender in the footage. What specific areas of the offender can be seen and from what angle are they depicted? Which features of the offender's face are clearly depicted, and which are obscured? When it comes to recognising the face of a familiar person, it has been demonstrated that the internal features, such as the eyes, nose and mouth area, are of far greater importance than the external features, such as face shape and hair.[95] In particular, it appears that great reliance is placed on the eye region, with Roberts and Bruce demonstrated that masking this region had a greater effect on the speed of face recognition than masking other regions of the face.[96]

Research in this area may have implications for the investigation and prosecution of offences. For example, it may be important that police officers identify and gather *all* available CCTV images in respect of a crime, as images from different CCTV surveillance systems will inevitably depict different features of the

93 Alice J O'Toole et al, 'Recognizing People from Dynamic and Static Faces and Bodies: Dissecting Identity with a Fusion Approach' (2011) 51(1) *Vision Research* 74, 74.

94 Robert A Johnston and Andrew J Edmonds, 'Familiar and Unfamiliar Face Recognition: A Review' (2009) 17(5) *Memory* 577, 586.

95 Peter J B Hancock, 'Unfamiliar Face Recognition' in Caroline Wilkinson and Christopher Rynn (eds), *Craniofacial Identification* (Cambridge University Press, 2012) 11, 13; Vicki Bruce, 'Familiar Face Recognition' in Caroline Wilkinson and Christopher Rynn (eds), *Craniofacial Identification* (Cambridge University Press, 2012) 1, 2; Haydn D Ellis, John W Shepherd and Graham M Davies, 'Identification of Familiar and Unfamiliar Faces from Internal and External Features: Some Implications for Theories of Face Recognition' (1979) 8(4) *Perception* 431, 439.

96 T Roberts and V Bruce, 'Feature Saliency in Judging the Sex and Familiarity of Faces' (1988) *Perception* 17, 475, cited in Robert A Johnston and Andrew J Edmonds, 'Familiar and Unfamiliar Face Recognition: A Review' (2009) 17(5) *Memory* 577, 588.

offender.[97] Further, the fact that an offender is wearing a disguise or attire that reduces the visibility of the offender's external features (such as a cap, hooded jacket or beanie) will not necessarily affect the quality of recognition evidence, which depends primarily on the internal features of the face.[98]

Familiarity with the accused

As noted above, research has demonstrated that humans are remarkably accurate at recognising familiar faces. However, familiarity with a person occurs on a spectrum, and it is unclear how much prior contact with a person is enough to generate a sufficient degree of familiarity to enable the person to be recognised. While courts have tended to focus on the number of prior encounters that a witness had with the accused, 'it is not yet clear at what point and after how many exposures a novel face becomes familiar'.[99]

In addition, the circumstances of the witness' prior contact with the accused may be relevant to determining levels of familiarity. For example, in *R v Ford*, the accused was charged with the stabbing murder of a fellow inmate at Goulburn Correctional Centre.[100] The prosecution sought to lead eyewitness recognition evidence from two inmates who were present in the yard when the deceased died. The defence objected to the evidence on the basis that the accused was not offered an identification parade. In concluding that an identification parade was impracticable because the witnesses were already familiar with the appearance of the accused, Barr J noted that

> Prison is a dangerous environment. The safety of individual prisoners depends on their keeping an eye out for other prisoners. They have an important practical interest in knowing who their neighbours are. A

97 This is discussed further in Chapter 6.

98 Cf *Longmair v Bott*, where one of the factors listed in support of the conclusion that the eyewitness recognition evidence of a police officer was insufficient to support a conviction was the fact that the offender was wearing a 'hoodie': *Longmair v Bott* [2010] NTSC 30.

99 Graham Davies and Sonya Thasen, 'Closed-Circuit Television: How Effective an Identification Aid?' (2000) 91(3) *British Journal of Psychology* 411, 424.

100 *R v Ford* (Unreported, Supreme Court of New South Wales, Barr J, 22 April 1998).

> casual encounter in a prison block or yard is not to be compared to a casual encounter between two strangers in a city street. The evidence shows that Mr Rees encountered the accused several times in such circumstances. Those encounters were likely to make the accused's face familiar to Mr Rees.[101]

Finally, the degree of familiarity a witness has with the face of an offender may depend, to some extent, on its distinctiveness. In two experiments, Valentine and Bruce demonstrated that the distinctiveness of a face affected the time it took to recognise the face as belonging to a known person. The faces of known people and celebrities that were rated as 'distinctive' were recognised more quickly than those rated as 'average'.[102]

The ability of the witness to recognise others

The amount of prior contact that a witness has had with a person is not the only determinant of familiarity. It has long been known that facial recognition abilities differ between people. When discussing the problematic nature of identification evidence, the 'Devlin Committee' noted that

> The capacity to memorise a face differs enormously from one man to another, but there is no way of finding out in the witness box how much of it the witness has got; no-one keeps a record of his successes and failures to submit to scrutiny.[103]

Since the publication of this report, however, there have been advances in research into person perception. Recent studies have indicated that the ability to recognise faces varies greatly and may, to a large extent, be genetically

101 Ibid, 4.

102 Tim Valentine and Vicki Bruce, 'Recognising Familiar Faces: The Role of Distinctiveness and Familiarity' (1986) 40 *Canadian Journal of Psychology* 300; Tim Valentine and Vicki Bruce, 'The Effects of Distinctiveness in Recognising and Classifying Faces' (1986) 15(5) *Perception* 525.

103 Departmental Committee on Evidence of Identification in Criminal Cases, 'Report to the Secretary of State for the Home Department of the Departmental Committee on Evidence of Identification in Criminal Cases (Devlin Committee Report)' 1976), [4.25].

determined.[104] At one end of the spectrum of ability, people with prosopagnosia or 'face blindness' have difficulties recognising even the most familiar of faces and are forced to rely on other cues, such as voice or context, to ascertain identity.[105] At the other end of the spectrum, people dubbed 'super-recognisers' are exceptionally good at face recognition and are able to recognise people they have only briefly seen in the past, regardless of the passage of time between the encounter or the context.[106] In 2009, Russell et al tested four people who claimed to have above-average face recognition ability.[107] Prior to testing, all related anecdotes about their exceptional face recognition abilities, such as:

> I do have to pretend that I don't remember [people], however, because it seems like I stalk them, or that they mean more to me than they do when I recall that we saw each other once walking on campus four years ago in front of the quad'[108]

During testing, the subjects who claimed to have superior face recognition skills performed much higher than the 21 control subjects, confirming that their ability to recognise people 'greatly exceeds that of normal people'.[109] Later research has confirmed that some people achieve extremely high scores when compared to control groups on both unfamiliar and familiar face-recognition tests.[110] It is estimated that approximately one percent of the population are 'super-recognisers'.[111]

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104 Jeremy B Wilmer et al, 'Human Face Recognition Ability is Specific and Highly Heritable' (2010) 107(11) *Proceedings of the National Academy of Sciences* 5238.

105 Vicki Bruce, 'Familiar Face Recognition' in Caroline Wilkinson and Christopher Rynn (eds), *Craniofacial Identification* (Cambridge University Press, 2012) 1, 1.

106 Richard Russell, Brad Duchaine and Ken Nakayama, 'Super-Recognizers: People With Extraordinary Face Recognition Ability' (2009) 16(2) *Psychonomic Bulletin & Review* 252, 256.

107 Ibid.

108 Ibid, 253.

109 Ibid.

110 Josh P Davis, Ashok Jansara and Karen Lander, '"I never forget a face!"' (2013) 26(10) *Psychologist* 726.

111 Madhumita Venkataramanan, 'The Superpower Police Now Use to Tackle Crime', *BBC* (online), 11 June 2015 <http://www.bbc.com/future/story/20150611-the-superpower-police-now-use-to-tackle-crime>.

It is unclear whether it is possible to train people to recognise faces with more accuracy.[112] Nevertheless, recent research hints at a future capacity to test the general ability of a witness to accurately recognise faces, thereby providing a mechanism in which to assess the likelihood that a particular act of recognition is correct. Today, the Metropolitan Police Service in London uses officers who qualify as 'super recognisers' in their criminal investigations. After the London riots in 2011, police officers identified as having superior face recognition skills were used to identify offenders,[113] while in 2014, a team of 10 police officers with superior face recognition abilities helped to identify the construction worker accused of the murder of a 14 year old girl.[114] Currently, the Metropolitan police force has a pool of 140 police officers with apparently superior face recognising skills who attempt to recognise offenders on a centralised database of CCTV images,[115] and is devising a face recognition test to be administered to new recruits.[116] Police departments in other overseas jurisdictions have also begun to inquire into the facial-recognition capabilities of their police officers.[117]

In addition to genetic or inherent ability, the ability of a witness to recognise familiar faces may also depend on the witness' age. Research has demonstrated

112 Cathy Burke, 'UK Cops Using Gifted "Super Recognizers" to Fight Crime', *Newsmax* (online), 16 June 2015 <http://www.newsmax.com/international/super-recognizers-facial-recognition-london-metropolitan-police-world/2015/06/16/id/650791/>.

113 It has been reported that 20 officers reviewed approximately 5,000 images of offenders and identified 609 people as a result of this process (65% of whom were prosecuted): Madhumita Venkataramanan, 'The Superpower Police Now Use to Tackle Crime', *BBC* (online), 11 June 2015 <http://www.bbc.com/future/story/20150611-the-superpower-police-now-use-to-tackle-crime>.

114 Alexandra Sims, '"Super Recognisers" Used by the Police to Identify Criminals and Spot Offenders in Crowds', *Independent* (online), 16 June 2015 <http://www.independent.co.uk/news/uk/crime/super-recognisers-used-by-the-police-to-identify-criminals-and-spot-offenders-in-crowds-10324186.html>.

115 Jack Grimston, 'Eagle-Eye of the Yard Can Spot Rioters by their Ears', *The Sunday Times* (online), 20 November 2011 <http://www.thesundaytimes.co.uk/sto/news/uk_news/National/Riots/article825660.ece>; Madhumita Venkataramanan, 'The Superpower Police Now Use to Tackle Crime', *BBC* (online), 11 June 2015 <http://www.bbc.com/future/story/20150611-the-superpower-police-now-use-to-tackle-crime>; Patrick Radden Keefe, 'The Detectives Who Never Forget a Face', *The New Yorker* (online), 22 August 2016 <http://www.newyorker.com/magazine/2016/08/22/londons-super-recognizer-police-force>.

116 Josh P Davis, *Are you a super recogniser?* University of Greenwich <http://superrecognisers.com/>.

117 Patrick Radden Keefe, 'The Detectives Who Never Forget a Face', *The New Yorker* (online), 22 August 2016 <http://www.newyorker.com/magazine/2016/08/22/londons-super-recognizer-police-force>.

that children use similar cues to adults for recognising familiar people[118] and that, like adults, children recognise faces more accurately than bodies.[119] However, age affects the accuracy of children's recognition of faces and they do not perform as well as adults at facial recognition tasks 'even into their early teens'.[120] The ability to learn and recognise faces continues to develop into a person's early 30s, with declines in ability seen 'as early as 50 years of age'[121] While this research indicates that it may be necessary to consider the witness' age when evaluating recognition evidence, it is still incomplete. The experiments which have been conducted to date have looked at short-term familiarity with a face (ie, familiarity acquired during the course of the experiment) and there is little research on the effect of age on the ability to recognise a highly-familiar face.

Contextual cues

Research indicates that contextual information may 'prime' recognition of familiar face.[122] For example, experiments have revealed that recognition of a person is generally facilitated if the image of the person is preceded by an image of a different, but semantically linked, person. For example, an image of a famous comedian will be recognised more quickly if it is preceded by an image of the comedian's partner ('close-associate priming')[123] while the image a famous singer may be recognised more quickly if it is preceded by an image of another famous

118 Rachel A Robbins and Max Coltheart, 'The Relative Importance of Heads, Bodies, and Movement to Person Recognition Across Development' (2015) 138 *Journal of Experimental Child Psychology* 1.

119 Samantha Bank et al, 'Face and Body Recognition Show Similar Improvement During Childhood' (2015) 137 *Journal of Experimental Child Psychology* 1.

120 Rachel A Robbins and Max Coltheart, 'The Relative Importance of Heads, Bodies, and Movement to Person Recognition Across Development' (2015) 138 *Journal of Experimental Child Psychology* 1.

121 Laura T Germine, Bradley Duchaine and Ken Nakayama, 'Where Cognitive Development and Aging Meet: Face Learning Ability Peaks after Age 30' (2011) 118 *Cognition* 201, 202.

122 See, eg, Sarah V Stevenage et al, 'Recognition by Association: Within-and Cross-Modality Associative Priming with Faces and Voices' (2014) 105(1) *British Journal of Psychology* 1; Tim Valentine and Vicki Bruce, 'Semantic Priming of Familiar Faces' (1986) 38(1) *Quarterly Journal of Experimental Psychology* 125.

123 Tim Valentine and Vicki Bruce, 'Semantic Priming of Familiar Faces' (1986) 38(1) *Quarterly Journal of Experimental Psychology* 125.

singer ('categorical priming').[124] In other words, 'knowledge from current context that a particular face is likely could lower the threshold for the face recognition unit corresponding to that persons' face'.[125]

However, there is another type of contextual cue that may be important in the forensic context—that is, environmental context. In 1982, Davies and Milne conducted an experiment that indicated that the ability to recognise an image of a familiar celebrity face was largely unaffected by a change in the physical background of the image, while recognition of unfamiliar faces was greatly affected by a similar change in background.[126] This research may indicate that the environmental context of a CCTV image is not important to the accuracy of recognition from the image, although the research has not demonstrated this conclusively.[127] Indeed, when discussing his research on facial recognition from poor quality images, Burton noted that the subjects in his experiments were familiar with the setting of the CCTV images they were shown (the psychology department of their university) and that, as such, it was possible that they expected to see local academics in the footage. He observed that:

> The help given by context and expectation needs to be quantified. For example, we do not yet know whether subjects would recognize a famous television personality, should one happen to have passed unexpectedly through this video context. Similarly, it is not clear how accurate they would have been in recognizing their lecturers if the lecturers had been presented in an unexpected context, such as a security recording of a crime. These are empirical questions, and it seems that there is a need for full exploration of the various parameters in order to guide good practice in the security industry.[128]

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124 Anna Stone, 'Categorical Priming of Famous Person Recognition: A Hitherto Overlooked Methodological Factor Can Resolve a Long-Standing Debate' (2008) 108 *Cognition* 874.

125 Tim Valentine and Vicki Bruce, 'Semantic Priming of Familiar Faces' (1986) 38(1) *Quarterly Journal of Experimental Psychology* 125, 126.

126 Graham Davis and Alan Milne, 'Recognising Faces in and out of Context' (1982) 2(4) *Current Psychological Research* 235.

127 Graham Davies and Sonya Thasen, 'Closed-Circuit Television: How Effective an Identification Aid?' (2000) 91(3) *British Journal of Psychology* 411, 424.

128 A Mike Burton et al, 'Face Recognition in Poor-Quality Video: Evidence From Security Surveillance' (1999) 10(3) *Psychological Science* 243, 248.

In addition to environmental context, it is also possible that 'clothing cues' may affect the reliability of recognition evidence. For example, research into eyewitness identification evidence has indicated that 'presenting the suspect in the same clothing worn by the perpetrator made participants more likely to choose the suspect, regardless of guilt or innocence'.[129] However, to date this has not been investigated. While more research is needed on the priming effect of environmental context and other cues such as attire, '[i]t is clear that contextual factors can be very important in our recognition of familiar people'.[130] As Bruce notes, the influence of these cues may mean that a witness who claims to recognise someone at a particular time or place when has actually 'only seen someone who resembles them'.[131]

The size of the pool of suspects

Another factor which may affect the reliability of recognition from CCTV images relates to the size of the pool of suspects, or how many people could be the offender. For example, in *Lariba v The Queen*, the UK Court of Appeal noted that the trial judge's view that the reliability of a certain recognition evidence was enhanced as the witnesses who viewed the CCTV footage were comparing the appearance of a limited number of known suspects (namely, members of the 'Get Money Gang'). However, the Court held that this approach was incorrect, and that only if the prosecution had 'excluded all other possible suspects, whether members of the GMG gang or not, could the witnesses by proved to have been making their recognition from a small pool of people.'[132]

There will be a limited pool of suspects, however, when an offence occurs in a secure environment, such as a correctional centre or an immigration detention

129 Victoria Z Lawson and Jennifer E Dysart, 'The Showup Identification Procedure: An Exploration of Systematic Biases' (2010) 19 *Legal and Criminological Psychology* 54, 64.

130 Vicki Bruce, 'Familiar Face Recognition' in Caroline Wilkinson and Christopher Rynn (eds), *Craniofacial Identification* (Cambridge University Press, 2012) 1, 8.

131 Ibid, 8.

132 *Lariba v The Queen* [2015] EWCA Crim 478, [38].

centre,[133] or when the offenders depicted in images are all wearing a particular uniform.[134] In these cases, the probative value of the evidence may be affected by the fact that the offender depicted in the images is one of a limited number of suspects. In the Canadian case of *R v Anderson*, for example, an inmate involved in a riot was described as being of 'native appearance'. While there was another inmate who was also of this appearance in the group of 23 prisoners housed in the unit, he was much taller than the appellant. As such, it was held that more weight could be placed on the correctional services officers' evidence that he recognised the inmate from images than could be placed on the evidence if the pool of suspects were much greater.[135]

The circumstances of the recognition

Research has demonstrated conclusively that there are a number of post-offence events or occurrences that can affect the accuracy of eyewitness identification evidence. In the last few decades, there has been a substantial amount of psychological research into these matters and, more specifically, the notion of 'suggestibility', or 'the degree to which a person's encoding, retention and retrieval of events can be influenced by a range of social and psychological factors'.[136]

The notion of suggestibility is also of great concern when evaluating the accuracy of recognition evidence from CCTV images. For example, the accuracy of recognition evidence from CCTV images may be undermined when the witness is 'primed' to see a particular person in the images. This could happen, for example, if a witness is aware that a particular person is a suspect before viewing the

133 See, eg, *Haidari v The Queen* [2015] NSWCCA 126; *R v Beattie* [2001] NSWCCA 502; *R v Drollett* [2005] NSWCCA 356; *R v Sterling* [2014] NSWDC 199. See also *R v Anderson* 2005 BCSC 1346.

134 *Police v Dorizzi* [2002] SASC 82.

135 *R v Anderson* 2005 BCSC 1346, [12].

136 Martine Powell, Maryanne Garry and Neil Brewer, 'Eyewitness Testimony' in Ian Freckelton and Hugh Selby (eds), *Expert Evidence* (Law Book Co, Online ed, 2016) [65.05], [65.209].

footage.[137] Alternatively, the person may be asked to view footage in order to determine if he or she can see a particular person in it. In both of these cases, there is a risk that the witness will conclude that he or she does, in fact, see that particular person in the footage, when it may only be a person with some resemblance to the suspect. The effect of the priming on the witness may be subconscious or in some circumstances, particularly where the viewing is organised by investigating authorities, the witness may claim to recognise the suggested person in order to assist police or appear helpful and knowledgeable.[138]

In addition, the value of a witness' recognition evidence may also be reduced when the act of recognition occurs in a group context. As Peek J noted in *R v Strauss*, '[t]he courts have always recognised that discussion between potential witnesses may severely reduce the value of the testimony of the individual witnesses and that this is particularly so in the area of identification evidence'.[139] In these cases, it is possible that comments or other non-verbal cues by others who are also viewing the images (or who already viewed the images) may have a subconscious influence on the witness, who may erroneously claim to recognise a person depicted in the images.

Judicial approaches to reliability

The above discussion demonstrates that recognition evidence based on images may have a number of advantages over traditional eyewitness evidence. The existence of a permanent record of the factual information on which the witness has based his or her conclusion of identity may assist in improving the quality of the evidence (as well as the fact-finder's ability to evaluate its accuracy). That said, a number of other factors may influence the reliability of the evidence. Some of these are well known in the eyewitness identification literature, such as estimator variables like the age of the witness, and system variables such as the way the evidence is collected. Others are unique to recognition based on images,

137 The concept of 'priming' is discussed further in Chapter 7.
138 See Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [421].
139 *Strauss v Police* [2013] SASC 3, [24].

such as the nature and quality of the images and the precise details of what is depicted of the offender and the environment in the image. The existence of one or more of these factors may result in evidence of doubtful reliability being led in a criminal prosecution.

Currently, the ability to address the deficiencies in this type of evidence (for example, in cross-examination or oral submissions) depends to a large extent on the knowledge and experience of those involved in criminal proceedings. How cognisant, therefore, are lawyers and judicial officers of the unique features of recognition evidence based on CCTV images? A review of the case law in which this type of evidence has been adduced (or sought to be adduced) indicates that there is a broad awareness of a number of the factors which may affect the reliability of the evidence. As discussed in Chapter 3, for example, the quality of the imagery is often mentioned when the admissibility or use of the evidence is being considered. In a small number of cases, it has been recognised that a witness who is familiar with the accused may be in a better position to recognise him or her in poor quality footage than the fact-finder.[140] This approach is consistent with the psychological research, which indicates that recognition can be accurate despite the degraded quality of CCTV images. However, it is not a position which has been uniformly adopted,[141] and is important that courts understand that the value of the recognition evidence should not be assessed by reference to what a person unfamiliar with the accused may discern from the footage. Instead, as was held by the UK Court of Appeal in *Lariba v The Queen,* consideration should be given to whether the footage is 'of sufficient quality to form the source material for recognition by witnesses who were very familiar with the appellant's appearance'.[142]

Largely as a result of their experience with offences that occur in secure environments, such as correctional centres, courts have also identified factors not explored in the psychological literature, such as the size of the pool of suspects and the context in which familiarity with the accused was acquired. Other factors,

140 See, eg, *Nguyen v The Queen* [2007] NSWCCA 363; *R v Sterling* [2014] NSWDC 199.
141 See, eg, *R v Drollett* [2005] NSWCCA 356.
142 *Lariba v The Queen* [2015] EWCA Crim 478, [36].

such as the ability of the witness to recognise others or the presence of contextual clues that may affect the evidence, have not received any judicial attention in the case law to date.

Of particular concern, however, is the limited judicial attention that has been given to the circumstances of the recognition in the existing jurisprudence. In some cases, courts appear to have downplayed the importance of this factor in assessing the reliability of the evidence. In *R v Gee*, for example, the NSWCCA considered the admissibility of evidence from relatives and acquaintances of the accused that he was the person depicted in CCTV images robbing a bank and several building societies. The Court noted that, as recognition of a person known to a witness is not affected by the passage of time, an out-of-court act of recognition is not usually relevant. The witness' testimony that the accused can be seen on the images was the relevant evidence.[143]

It is clear, however, that the circumstances surrounding the act of recognition may have a significant effect on the quality of the evidence. Despite this, the nature of the information given to the witness prior to being shown CCTV footage is not always canvassed in evidence.[144] In other cases, although there is factual material to indicate that a witness may have been primed to recognise a particular person, the issue is not raised in the litigation. In *Neville v The Queen*, for example, the prosecution was permitted to adduce evidence from two police officers, both of whom claimed to recognise the appellant as the shooter depicted in CCTV footage of a murder. On appeal, the Court engaged in a lengthy discussion of the admissibility of the evidence, but at no point averted to the fact that the reliability of the evidence may have been affected by the fact that the police who recognised the appellant were aware that the accused was in custody for the murder and that the investigating officers were actively seeking people who were familiar with her appearance to view the CCTV images.[145]

143 *R v Gee* [2000] NSWCCA 198, [39].
144 See, eg, *R v Brease* [2013] QCA 249.
145 *Neville v The Queen* [2004] WASCA 62, [14], [20].

In cases where issues of the circumstances of the recognition have been raised and ventilated, judges have expressed different views about the consequences of the priming or contamination on the probative value of the evidence. In *R v Theos*, for example, the Victorian Court of Appeal reviewed the admissibility of evidence given by two witnesses that they recognised the appellant in CCTV images of an armed robbery. One of the witnesses had been informed by the investigating police officer that he was trying to identify the appellant from photographs of the robbery before viewing the footage, while the other was apparently aware of who it was the police were hoping he would recognise. On appeal, it was argued that the recognition evidence should not have been admitted (or should have been withdrawn from the jury when its deficiencies became apparent). In rejecting this argument, Tadgell JA held that although it was not always a desirable practice, there was 'nothing inherently objectionable in saying to a man who is known to be very familiar with X and his habits: "I am told that you know X well. Do you identify him in this photograph?'[146] Adopting the opposite view, Smith AJA held that the evidence was flawed and lacked probative value as 'a person however fair and careful ... would be more likely to identify the known suspect as the person shown by the police'.[147]

The failure of the courts to scrutinise the circumstances surrounding the recognition of a person depicted in CCTV images, and the disparate judicial views that have been expressed about the consequences of any suggestion in the recognition process, is clearly undesirable. In the absence of any provisions designed to enhance the reliability of the evidence, the lack of judicial concern about its origins and quality is disturbing. This is more so the case given that the circumstances of the act of recognition often leave much to be desired. In many instances, for example, including in two of the cases observed for this thesis, investigating police view CCTV imagery of offenders at the scene of the offence. In *R v Gibson*, for example, the police who arrived at the scene of the attempted armed robbery in Lethbridge Park viewed the CCTV images at the service station with the attendant. While there was limited evidence in this case of what was said

146 *R v Theos* (1996) 89 A Crim R 486, 498.
147 Ibid, 506.

during this group viewing of the footage, the issue was more thoroughly explored in *R v Sutherland.* In this case, the police who attended the Woolworths store in Coonabarabran after the armed robbery viewed the relevant CCTV imagery in the store while in the company of the store manager. One of the recognition witnesses gave evidence that it was at this point he 'thought in his head' that the offender looked like the accused. The police then travelled by car back to the police station, during which time the witness could not recall there being any conversation about the possible identity of the offender. At the police station, he viewed the images again, and agreed with the comment of another police officer that the person 'looked a bit like Roy Sutherland'. He denied, however, that his recognition of the accused was influenced by this comment.

Additional concerns about recognition evidence based on CCTV images

However, it is not simply the fact that evidence may be unreliable that gives it a dangerous or hazardous quality. As with eyewitness evidence, it has a number of other features that makes it difficult to accurately assess its probative value.[148] First, like eyewitness identification evidence, recognition evidence based on CCTV images is highly probative, providing a direct and necessary link between the offender and the suspect. Indeed, it is arguable that recognition evidence has even more probative weight than eyewitness identification evidence as a fact-finder is less likely to suspect error in the act of recognition than in the act of identification of a person previously unknown to the witness. The probative value of the evidence is enhanced by the fact that, like eyewitnesses, those who testify that they recognise an offender in a CCTV image are often honest and sincere. As the High Court noted in *Festa v The Queen,* 'few witnesses are as convincing as the honest—but perhaps mistaken—witness who adamantly claims to recognise the accused as the person who committed the crime or was present in incriminating circumstances'.[149]

148 Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Uniform Evidence Law*, Report No 102 (2005), [13.6].

149 *Festa v The Queen* [2001] HCA 72, [64].

Second, as is the case with eyewitness identification evidence, the trustworthiness of recognition evidence based on CCTV images is extremely difficult to test during cross-examination. In common law legal systems, cross-examination is considered to be the route to truth; it is the means by which a witness will be forced to 'acknowledge exceptions, complications, anomalies, inadequacies, inaccuracies, limitations, and insecure foundations of his [or her] previous testimony.'[150] In the case of eyewitness identification evidence, however, '[t]he weapon of cross-examination is blunted. A witness says that he recognizes the man, and that is that or almost that.'[151] The same is also the case for recognition evidence based on CCTV images. As the case law demonstrates, witnesses often find it difficult to articulate with any degree of precision exactly *why* they claim to recognise someone in a piece of CCTV footage. In the trial of Mundarra Smith, for example, one of the police officers who recognised the co-accused, Jason Nicholas, was questioned as follows:

> Q: After you were transferred down to Batemans Bay, was there any specific feature of Jason Nicholas' appearance that remained in your memory?
>
> A: No specific feature. Jason does not have any unusual features.
>
> ...
>
> Q: Now, is there any specific feature of the bandit depicted in those photographs who is wearing the ATM cap that you recognised as being a feature of Jason Nicholas?
>
> A: No, I recognised his face as a whole because I recognised him as a person, no specific feature.
>
> Q: No specific feature?
>
> A: No.[152]

150 Christopher Hamlin, 'Scientific Method and Expert Witnessing: Victorian Perspectives on a Modern Problem' (1986) 16(3) *Social Studies of Science* 485, 499.

151 Departmental Committee on Evidence of Identification in Criminal Cases, 'Report to the Secretary of State for the Home Department of the Departmental Committee on Evidence of Identification in Criminal Cases (Devlin Committee Report)' 1976), [1.24].

152 Transcript of Proceedings, *R v Smith* (District Court of New South Wales, Latham J, 31 August 1998).

Similarly, in the trial of *R v Sutherland*, two of the witnesses who claimed to recognise the accused in the CCTV footage were cross-examined about their conclusion about the identity of the offender. One could not nominate any particular feature that led him to the conclusion that the offender was the accused. The other stated it was the appearance of the accused's profile and his manner of walking that she recognised in the footage. When cross-examined about the accused's style of walking, she struggled to articulate its distinctive features. She stated that the accused walked in a casual manner, at a moderate pace and with dropped shoulders. At one point during the cross-examination, when the witness' evidence was being further probed, she was informed by the judge that she was being asked to 'put into words how the walk looked', a task that she evidently found difficult. The genuine inability of many witnesses to explicate the precise basis for their act of recognition is at odds with the desire of the law to adduce 'evidence of a physiognomic register, wherein each characteristic or feature is named, catalogued, and checked off by the viewer before arriving at a conclusion that the image represents the defendant'.[153] It also means that in many cases involving recognition evidence 'there is no story to dissect'.[154] When the identity of a person is experienced rather than perceived, or when, to adopt the words of Descartes, when 'it is the soul that sees, not the eye',[155] there are limited ways that an advocate can challenge the evidence.

Further, the capacity of cross-examination to tease out and expose deficiencies in recognition evidence from images depends to a large extent on the knowledge and skill of the individual advocate. Cross-examination will be ineffective if the advocate is ill-prepared or does not sufficiently understand the potential deficiencies of the evidence. Moreover, research has demonstrated that lawyers and judicial officers have limited knowledge of the myriad factors that can affect

153 Katherine Biber, *Captive Images: Race, Crime, Photography* (Routledge-Cavendish, 2007), 52.

154 'Editorial: Identifying Problems with Identification', (2004) 28(2) *Criminal Law Journal* 69.

155 Cited in Richard K Sherwin, *Visualizing Law in the Age of the Digital Baroque: Arabesques and Entanglements* (Routledge, 2011), 28.

the reliability of eyewitness identification evidence,[156] and it is highly likely that this is also the case for recognition evidence based on images.

Finally, the experience of the criminal justice system may be starting to indicate that, like eyewitness identification evidence, recognition evidence based on CCTV images may be responsible for miscarriages of justice. While the significance of eyewitness identification evidence in wrongful convictions is beyond dispute,[157] there is no corresponding body of knowledge about the role of recognition evidence based on CCTV images in miscarriages of justice. Nevertheless, in addition to the case of William Mills discussed above, there are several reported examples of inaccurate recognition evidence forming the basis of the decision to arrest the wrong person. In 2013, for example, Lloyd Anderson was wrongly identified as a suspected murderer from CCTV images,[158] while Darryl Borg, who had been charged with the robbery of a grocery store after being identified through CCTV footage, was released after it was revealed that the real offender was also in custody for the offence.[159] In 2014, Richard Toal was charged with a burglary offence after a police officer claimed to recognise him from internally circulated CCTV footage, only to be released when the officer later realised he was not the offender.[160] Fortunately, the erroneous nature of the

156 Tanja Rapus Benton et al, 'Eyewitness Memory is Still Not Common Sense: Comparing Jurors, Judges and Law Enforcement to Eyewitness Experts' (2006) 20 *Applied Cognitive Psychology* 115.

157 In the United States, for example, 72% of the first 325 DNA-exoneration cases involved misidentification by at least one eyewitness to the offence: The Innocence Project, *The Causes of Wrongful Conviction* <http://www.innocenceproject.org/causes-wrongful-conviction>. Further, in their study of 340 reported exonerations between 1989 and 2003, Gross et al discovered that eyewitness misidentification (whether accidental or deliberate) was present in 64% of the cases: Samuel R Gross et al, 'Exonerations in the United States 1989 through 2003' (2005) 95(2) *Journal of Criminal Law & Criminology* 523, 542. It is accepted that the wrongful convictions that have been identified to date represent the 'tip of the iceberg' and that in many cases, wrongful convictions will not be discovered and corrected by the legal system: Ibid, 531.

158 'Musician Gets £5000 in Damages After Police Wrongly Identified him on CCTV and Raided his Home in Hunt for Missing woman ', *Daily Record* (online), 3 September 2013 <http://www.dailyrecord.co.uk/news/scottish-news/musician-gets-5000-damages-after-2246777>.

159 Waylon Johnston, 'Man Wrongly Accused of Hold-Up is Released', *Times of Malta* (online), 10 August 2013 <http://www.timesofmalta.com/articles/view/20130810/local/Man-wrongly-accused-of-hold-up-is-released.481470>.

160 Jane Lee, 'Police to Pay $500 After Wrong Man Held for Burglary', *The Age* (online), 30 May 2014 <http://www.theage.com.au/victoria/police-to-pay-500-after-wrong-man-held-for-burglary-20140529-397xc.html>.

recognition evidence in these cases was discovered prior to the conviction of the accused. However, it is unlikely that all such errors will be corrected in this manner, and from these examples it is possible to speculate that there will be more instances of wrongful convictions that are attributable to erroneous recognition evidence based on CCTV images in the future.

Conclusion

In criminal prosecutions, eyewitness identification evidence is often vitally important. It is also notoriously unreliable. As the United States Supreme Court has noted, 'the annals of criminal law are rife with instances of mistaken identification'.[161] In devising ways to address this dilemma, and to regulate the admission into evidence and use by the fact-finder, the law has been informed by a vast body of psychological literature. Since the 1970s, law reform bodies, legislative authorities and judicial officers have drawn upon the knowledge of experimental and cognitive psychologists to devise ways in which to minimise the risk to the proper administration of justice that is posed by this form of evidence. Currently, under the uniform Evidence Acts, eyewitness identification evidence is subject to different rules of admissibility and, if it is admitted, a judge is required to direct the jury about its problematic nature.

There is much less academic literature about the reliability of recognition evidence based on CCTV images. However, as legal scholar Ruth Costigan has observed, 'if miscarriages of justice are to be guarded against, decisions on the admissibility of identification from CCTV, and directions to the jury as to the weight of such evidence, must by informed by the psychology research'.[162] This chapter has relied on psychological research and case law to explore the nature of recognition evidence based on CCTV images and has concluded that the evidence is broadly analogous to eyewitness identification evidence. As with eyewitness identification, it is potentially unreliable, difficult to test, and highly probative.

161 *United States v Wade* 388 US 230 (1967).

162 Ruth Costigan, 'Identification from CCTV: The Risk of Injustice' (2007) *Criminal Law Review* 591, 596.

Further, there are indications that, like eyewitness identification evidence, it is a type of evidence that may play a substantial role in miscarriages of justice. Unlike eyewitness identification evidence, however, recognition evidence based on CCTV images is largely unregulated by the laws of evidence or existing police procedures. Given its problematic nature, it is imperative that steps be taken to attempt to safeguard its accuracy at all stages in the criminal justice system, but perhaps most critically at the point it is initially collected and handled by investigators. While it is possible that, over time, courts may ultimately impose greater control over this procedural handling of recognition evidence, as David Dixon notes, it is undesirable to leave the legal regulation of policing to 'the vagaries of case law'.[163] While courts play a vital role interpreting and enforcing rules governing police behaviour, 'they cannot be expected to take the leading role in regulating policing'.[164] The following chapter explores approaches to reform of the law of evidence to minimise the risk of miscarriages of justice arising from the admission and use of recognition evidence based on CCTV images.

163 David Dixon, '"A Window into the Interviewing Process?" The Audio-Visual Recording of Police Interrogation in New South Wales, Australia' (2006) 16(4) *Policing and Society* 323, 344.

164 Ibid.

6. IMPROVING APPROACHES TO ADMISSIBLE RECOGNITION EVIDENCE

> [A]n Act takes on a life of its own ... [T]he ongoing Act resembles a vessel launched on some one-way voyage from the old world to the new. The vessel is not going to return; nor are its passengers. Having only what they set out with, they cope as best they can. On arrival in the present, they deploy their native endowments under conditions originally unguessed at.[1]

Introduction

The *Evidence Act 1995* (NSW) and the *Evidence Act 1995* (Cth) were the result of almost 29 years of review of the law of evidence.[2] At the time of their enactment, they represented a comprehensive reform of the law of evidence (which at that time comprised a 'miscellaneous collection'[3] of 'highly complex' and 'arcane' rules).[4] Over the years, however, difficulties in the interpretation and application of the legislation emerged, and in 2005, on the tenth anniversary of the legislation, the Australian Law Reform Commission and the New South Wales Law Reform Commission were asked to review the Acts (and the Victorian Law Reform Commission later joined these Commissions in the review effort).[5] After analysing relevant case law and consulting with stakeholders in all states and territories, the Commissions made a number of joint recommendations for reform which were aimed at remedying defects in the legislation.[6]

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1 F A R Bennion, *Statutory Interpretation: A Code* (Butterworths, 3rd ed, 1997), cited in Jeffrey Barnes, 'The Life Cycle of Law Reform' (2006) 9 *Flinders Journal of Law Reform* 227, 234.

2 New South Wales, *Parliamentary Debates*, Legislative Assembly, 31 May 1995, 133 (J Shaw, Attorney General, and Minister for Industrial Relations).

3 Ibid.

4 Australian Law Reform Commission, *Evidence*, Report No 38 (1987), [3].

5 Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Uniform Evidence Law*, Report No 102 (2005). The Victorian Law Reform Commission later joined these Commissions in the review effort:

6 Ibid.

When undertaking their inquiry, the Commissions were asked to have particular regard to certain areas of the law.[7] Identification evidence was not one of these areas and, while the Final Report contained some analysis of the identification provisions in the Act, it did not refer to or discuss recognition evidence based on images. As the previous chapter has demonstrated, however, this type of evidence is problematic. As with eyewitness identification evidence, its reliability depends to a large extent on its treatment at the investigative stage. For this reason, it is both logical and desirable to attempt to regulate the way in which it is collected and handled by police officers in order to minimise the risk that the evidence will be degraded by external influences. It is also desirable to ensure that the evidence, once collected and presented to the fact-finder, is approached and used in a manner which promotes accurate fact-finding and reduces the risk of wrongful convictions.

This chapter aims to fill the gap in the discussion in ALRC 102, *Uniform Evidence Law*, by discussing what changes could be implemented to ensure that the *Evidence Act 1995* (NSW) adequately controls the admission and use of admissible recognition evidence based on a post-offence viewing of CCTV images. It begins by examining the approach taken to the regulation of this type of evidence in three overseas jurisdictions—namely, Canada, England and Wales, and New Zealand.[8] It then draws upon this comparative material to discuss what practical and achievable reforms could be implemented in NSW and other uniform Evidence Act jurisdictions to ensure that the goals of the *Evidence Act 1995* (NSW) are met in matters involving recognition evidence based on CCTV images.

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7 The were as follows: (i) the examination and re-examination of witnesses, before and during proceedings; (ii) the hearsay rule and its exceptions; (iii) the opinion rule and its exceptions; (iv) the coincidence rule; (v) the credibility rule and its exceptions; and (vi) privileges, including client legal privilege: see Ibid, Terms of Reference.

8 While it would also be possible to include the United States of America in the analysis in this section, the diversity of approaches to the regulation of eyewitness identification evidence at the state level makes meaningful comparison between the jurisdictions difficult. For an overview of the legal framework for the admission and assessment of eyewitness identification evidence in the US, see National Reseach Council of the National Academies, *Identifying the Culprit: Assessing Eyewitness Identification* (National Acadmies Press, 2014), ch 3.

Overseas approaches

This section examines the approach taken to the admissibility and use of recognition evidence based on CCTV images in Canada, England and Wales, and New Zealand. From the outset, it should be noted that there are differences in the way the legal systems in these three jurisdictions operate in practice.[9] However, they have been selected for comparison as they all have adversarial systems of justice and relatively similar evidence law (as these laws were derived from a shared common law heritage). As such, they are broadly comparable to Australia and their experiences with and approaches to the admission and use of recognition evidence derived from CCTV images may be instructive in uniform Evidence Act jurisdictions.

As noted in Chapter 4, recognition evidence from CCTV images in each of these overseas jurisdictions is classified as lay opinion evidence. In England and Wales and Canada, the admissibility of lay opinion evidence is governed by the common law, while in New Zealand it is governed by s 24 of the *Evidence Act 1996* (NZ). The requirement in Canada that lay opinion evidence must be helpful to the fact-finder before it is admissible and the criteria that have been developed to determine whether it satisfies this helpfulness test provides some measure of protection against the admission of unreliable recognition evidence. Similarly, the judicial discretion that exists in all the jurisdictions to exclude the evidence if it is more prejudicial than probative provides another safeguard against the admission of unreliable evidence.

As discussed in Chapter 5, however, these and other traditional safeguards, such as cross-examination, are not sufficient to guard against the risk of miscarriages of justice that attends the adduction of recognition evidence from CCTV images. Accordingly, in each of the jurisdictions examined below, additional attempts have been made to minimise the hazards of recognition evidence based on CCTV images. In England and Wales, a code of practice directed at police officers

9 Gary Edmond et al, 'Admissibility Compared: The reception of incriminating expert evidence (ie., forensic science) in four adversarial jurisdictions' (2013) 3 *University of Denver Criminal Law Review* 31, 32.

governs the collection and handling of this type of evidence, while in New Zealand a legislative provision in the *Evidence Act 1996* (NZ) regulates its admissibility. In Canada, emphasis is placed on the education of prosecutors and police officers as to the dangers of identification evidence and the ways to preserve the quality of the evidence during interviews. The approach of each of these jurisdictions to recognition evidence based on CCTV images is examined in turn.

Canada

In Canada, the rules of evidence are primarily determined by the common law.[10] Under the common law, recognition evidence from CCTV images is classified as non-expert opinion evidence that is admissible if it is helpful to the fact-finder and is regularly admitted in criminal proceedings.[11] The evidence will be 'helpful' if the witness is in a better position than the fact-finder to give the opinion because he or she is familiar with the appearance of the accused. In *R v Anderson*, the Court listed three indicia for the reception of recognition evidence, namely:

(i) the length of the prior relationship between the witness and the accused;
(ii) the circumstances of the prior relationship between the witness and the accused; and
(iii) the recency of the contact between the witness and the accused prior to the act of recognition.[12]

However, the degree of familiarity required to establish helpfulness 'is not particularly high'[13] and a prior opportunity to observe the accused may be

10 Lee Stuesser, 'A Comparison of the Law of Evidence' (2009) 2 *Journal of the Australasian Law Teachers Association* 73; Gary Edmond et al, 'Admissibility Compared: The reception of incriminating expert evidence (ie., forensic science) in four adversarial jurisdictions' (2013) 3 *University of Denver Criminal Law Review* 31.

11 See, eg, *R v Fisher* 2015 BCPC 0288; *R v Antone* 2015 BCSC 1243; *R v Sheik-Hussein* 2015 ONSC 2888; *R v Knife* 2011 SKQB 443; *R v Sinclair* 2009 SKPC 74; *R v Anderson* 2005 BCSC 1346; *R v Panghali* 2010 BCSC 1710.

12 *R v Anderson* 2005 BCSC 1346, [25].

enough.[14] The prior observation need not be an observation of the accused in person, but can also be an observation of a photograph of the accused.[15] In *R v Schmidt*, for example, the Provincial Court of British Columbia held that the fact that a police officer had a photograph of a person suspected to be involved in a 'dial-a-dope' operation in his police station (and at times on his desk) was sufficient to provide him with enough prior familiarity to recognise the suspect when purchasing cocaine from him.[16] While the requirement of prior familiarity establishes the helpfulness of the evidence, generally the degree of familiarity is a matter that goes to the weight of the evidence (as opposed to its admissibility).[17] The weight to be given to the evidence depends on the indicia outlined above, as well as two further factors: the cumulative effect of recognition evidence from more than one witness and the circumstances of the recognition.[18] It is not necessary for a witness to be able to point to any unique feature or idiosyncrasy of the person depicted on the images before the recognition evidence will be admissible.[19]

There are no legislative provisions which govern the collection of eyewitness identification evidence or recognition evidence in Canada. However, a number of inquiries have recommended specific police practices and procedures which, if followed, would help to ensure the reliability of eyewitness identification evidence.[20] In addition, in 2005, the Federal Provincial Territorial Heads of Prosecutions Committee's Working Group on the Prevention of Miscarriages of Justice (the Working Group) made a number of recommendations about the standards and practices that should be adopted by Canadian police agencies when

13 *R v Schmidt* 2012 BCPC 247, [66].
14 *R v PTC* 2000 BCSC 342, [67].
15 *R v Schmidt* 2012 BCPC 247.
16 Ibid.
17 *R v Anderson* 2005 BCSC 1346; *R v PTC* 2000 BCSC 342. See also *R v Smith* 2011 BCCA 362, [31].
18 *R v Anderson* 2005 BCSC 1346, [25].
19 *R v Berhe* 2012 ONCA 716.
20 The Honourable Fred Kaufman, *Report of the Kaufman Commission on Proceedings Involving Guy Paul Morin* (1998); Peter de C Cory, *The Inquiry Regarding Thomas Sophonow: The Investigation, Prosecution and Consideration of Entitlement to Compensation* (2001).

collecting identification evidence.[21] While it appears that these are generally being complied with by many Canadian police agencies,[22] the recommendations only deal with eyewitness identification procedures (namely, the practices which should be adopted when conducting a lineup or picture identification procedure) and not with the procedures which should be followed when collecting recognition evidence based on CCTV images.

In addition to directing recommendations at policing agencies, the Working Group also listed a number of 'practical suggestions' for prosecutors, many of which attempt to ensure that the quality of identification evidence is preserved, analysed and tested in criminal prosecutions.[23] While the Working Group's focus was on eyewitness identification evidence, a number of the suggestions are equally applicable to recognition evidence based on CCTV images. For example, prosecutors are advised to critically review all of the available identification evidence, and the manner in which it was obtained, in a timely manner.[24] They are discouraged from interviewing witnesses collectively or engaging in any practice which may contaminate a previous identification by the witness (such as showing the witness a single photograph of the accused) and must not engage in any practice which may alter a witness' confidence in his or her testimony. Finally, they are encouraged to always lead evidence of the history of the identification in a criminal prosecution (that is, evidence about the circumstances of the identification) and to be wary of prosecutions 'based on weak single-witness identification'. These practical suggestions have since been endorsed by the Public Prosecution Service of Canada. [25]

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21 Federal Provincial Territorial Heads of Prosecutions Committee Working Group, *Report on the Prevention of Miscarriages of Justice* (2005), ch 5. See also Federal Provincial Territorial Heads of Prosecutions Subcommittee on the Prevention of Wrongful Convictions, 'The Path to Justice: Preventing Wrongful Convictions' (2011).

22 Federal Provincial Territorial Heads of Prosecutions Subcommittee on the Prevention of Wrongful Convictions, 'The Path to Justice: Preventing Wrongful Convictions' (2011), [v].

23 Federal Provincial Territorial Heads of Prosecutions Committee Working Group, *Report on the Prevention of Miscarriages of Justice* (2005), 54–55.

24 Ibid, 54.

25 Public Prosecution Service of Canada, *Public Prosecution Service of Canada Deskbook* (2014), [2.4].

The Working Group also recommended that further education on interviewing techniques and eyewitness misidentifications be provided to both police and prosecutors.[26] In 2011, it was noted that the Working Group's report had been 'an important catalyst in shedding light on the causes and circumstances leading to wrongful conviction'[27] and that, as a result of its recommendations, there had been 'a phenomenal level of educational activity among police and prosecutors about the causes of wrongful convictions'.[28]

If recognition evidence is collected in a manner that may have contaminated or otherwise weakened the evidence, the Court has a discretion at common law to exclude the evidence if its probative value is outweighed by its prejudicial effect.[29] However, this discretion does not appear to be widely used. In many cases, there is little or no discussion surrounding the circumstances of the recognition[30] and any contamination or suggestion that may have affected the quality of the evidence is generally considered a factor to be taken into account when determining the weight to be given to the evidence (as opposed to its admissibility).[31] In *R v Schmidt*, for example, one of the recognition witnesses (a correctional services officer) saw a wanted poster of the accused, but could not remember when he had seen him before or 'place the name'. It was only when another worker appeared and said words to the effect of 'that's Cooper' that the witness 'put the face and name together'.[32] While counsel for the accused mentioned the circumstances of the recognition, the trial judge did not canvass it in his judgment and the evidence was held to be admissible.[33] Nevertheless, it has been held that when directing the jury, a trial judge should, among other things,

26 Federal Provincial Territorial Heads of Prosecutions Committee Working Group, *Report on the Prevention of Miscarriages of Justice* (2005), 55.

27 Federal Provincial Territorial Heads of Prosecutions Subcommittee on the Prevention of Wrongful Convictions, 'The Path to Justice: Preventing Wrongful Convictions' (2011), Executive Summary.

28 Ibid, xi.

29 *R v Morris* [1983] 2 SCR 190; Angela Baxter, 'Identification Evidence in Canada: Problems and a Potential Solution' (2007) 52 *Criminal Law Quarterly* 175.

30 See, eg, *R v Ibrahim* 2015 ONCJ 470, [10]; *R v Fisher* 2015 BCPC 0288, [50]; *R v Sheik-Hussein* 2015 ONSC 2888. Cf, however, *R v Sykes* 2014 NSSC 320, [50]; *R v Gough-Hollohan* 2014 Can LII 38948.

31 *R v Boersma* 2009 ONCJ 178.

32 *R v Schmidt* 2012 BCPC 247, [45].

33 Ibid, [71]–[72].

'review the circumstances in which the particular identifications came to be made and point out any factors detracting from their reliability'.[34]

England and Wales

Prior to 2011, the gathering of recognition evidence based on CCTV images was not expressly regulated in England and Wales. As is currently the case in NSW, evidence that a witness recognised a person depicted in CCTV images was prima facie admissible in criminal prosecutions, subject to the residual judicial discretion to exclude it.[35] The case law on the admissibility of recognition evidence drew no distinction between post-offence recognition evidence from images and eyewitness recognition evidence.[36]

As early as 1993, however, there were judicial concerns about the quality of recognition evidence from CCTV images. In *Caldwell v Dixon*, the Court of Appeal reviewed the convictions of Paul Caldwell and Terence Dixon for the armed robbery of a general store. At the appellants' trial, the prosecution led recognition evidence from police officers who had viewed CCTV footage of the offence. The evidence was gathered after the police officer in charge of the investigation showed the CCTV footage to large groups of fellow officers at various police stations (he estimated that up to one hundred officers could have seen the footage).[37] Each appellant was recognised by two police officers, both of whom claimed to have no prior knowledge that the appellants had been arrested for the offence. Further, there was no evidence they had been prompted by anyone else viewing the footage to make the recognition. Although the Court of Appeal dismissed the challenge to the admissibility of the evidence, it noted that video recordings of offences were becoming more prevalent, and that in cases where the footage was of poor quality, or when the view of the offender in the footage was limited, 'it would be desirable to regulate its showing so as to maximise the prospects of any recognition evidence being truly spontaneous and independent

34 *R v D'Amico* (1993) 16 OR (3d) 125 (CA), 129.
35 *Attorney General's Reference No 2 of 2002* [2002] EWCA 2373.
36 *R v Caldwell and Dixon* (1993) CLR 862.
37 Ibid, 3.

and minimise the risk of anything being said or done which might ... prompt the recognition of some particular person.'[38]

Fifteen years later, in *Smith (Dean) & Others*, the Court of Appeal again expressed concern about the absence of any means to test the reliability of recognition evidence from police officers who viewed CCTV images of suspects. It held that, in cases where a police officer claimed to recognise an offender from post-offences images, it was important that his or her initial reaction to a recording was recorded, as well as his or her reasons for recognising the offender.[39] Further, the Court observed that it was 'vital that a protocol is prepared which provides the safeguard of measuring the recognition against an objective standard of assessment'.[40]

Although *Smith (Dean) & Ors* was cited with approval in later jurisprudence, recognition evidence from police officers was still admitted in a number of cases despite the fact that no record had been made of the recognition procedure and there had been no attempt at the investigative stage to record the reason the witness claimed to recognise the accused.[41] In any event, the safeguards proposed in *Smith (Dean) & Ors* were not comprehensive and did not expressly cover other facts that may affect the reliability of recognition evidence based on CCTV images, such as the potential contamination of the evidence by suggestion. For example, in *R v Chaney*, a case involving the theft of a shotgun from a gun shop, a police officer gave evidence that he recognised the accused as the suspect depicted in CCTV surveillance footage taken in a car park.[42] He viewed stills of CCTV footage that were sent to him in an email by the investigating police officer along with the text, 'I've attached some stills of our offence … which officers in Kent also believe to be Chaney. The stills are not clear, but I would be interested in your thoughts.' On appeal, the Court accepted an argument that the procedures set out in *Smith* had been followed. In relation to the potential contamination of

38 Ibid.
39 *R v Smith (Dean) & Ors* [2008] EWCA 1342.
40 Ibid, [69].
41 *R v McGrath* [2009] EWCA Crim 1758; *R v Watts* [2010] EWCA Crim 1743.
42 *Chaney v The Queen* [2009] EWCA Crim 21.

the evidence, it held that the fact that the name of the appellant was contained in the email was available to the jury and that, in light of other incriminating evidence, the appellant had been rightly convicted.[43]

In March 2011, a new version of Code D of the *Police and Criminal Evidence Act 1984* (UK) came into effect which included provisions regulating the gathering of recognition evidence from images. The relevant parts of the Code apply when 'any person, including a police officer, is asked if they recognise anyone they see in an image as being someone they know and to test their claim that they recognise that person as someone who is known to them'.[44] In practice therefore, the Code will apply when police make arrangements for a potential witness to view CCTV images in order to ascertain if the witness can recognise anyone in the images.[45] The Code requires a potential witness to be shown the image on his or her own in order to guard against the possibility of collusion with other witnesses and mistaken recognition.[46] If a suspect is known to police, the principles for video identification by eyewitnesses should be followed (so far as possible).[47] These include ensuring that a witness is not given any indication of the suspect's identity prior to or during the viewing.[48] The Code also requires that a record be kept of a number of matters that may be relevant to the reliability of the evidence. Paragraph [3.36] provides as follows:

> 3.36 A record of the circumstances and conditions under which the person is given an opportunity to recognise the individual must be made and the record must include:
>
> (a) Whether the person knew or was given information concerning the name or identity of any suspect.
> (b) What the person has been told *before* the viewing about the offence, the person(s) depicted in the images or the offender and by whom.

43 Ibid, [29].
44 *Police and Criminal Evidence Act 1984 Code D*, [1.2A], [3.34], s 3 pt B.
45 *Lariba v The Queen* [2015] EWCA Crim 478, [42].
46 *Police and Criminal Evidence Act 1984 Code D*, [3.35].
47 Ibid.
48 Ibid, Annexure A, [10], [13].

(c) How and by whom the witness was asked to view the image or look at the individual.

(d) Whether the viewing was alone or with others and if with others, the reason for it.

(e) The arrangements under which the person viewed the film or saw the individual and by whom those arrangements were made.

(f) Whether the viewing of any images was arranged as part of a mass circulation to police and the public or for selected persons.

(g) The date time and place images were viewed or further viewed or the individual was seen.

(h) The times between which the images were viewed or the individual was seen.

(i) How the viewing of images or sighting of the individual was controlled and by whom.

(j) Whether the person was familiar with the location shown in any images or the place where they saw the individual and if so, why.

(k) Whether or not on this occasion, the person claims to recognise any image shown, or any individual seen, as being someone known to them, and if they do:

(i) the reason

(ii) the words of recognition

(iii) any expressions of doubt

(iv) what features of the image or the individual triggered the recognition.

A failure to comply with provisions in Code D may result in the evidence being excluded under s 78 of PACE because 'having regard to all the circumstances, including the circumstances in which the evidence was obtained, the admission of the evidence would have such an adverse effect on the fairness of the proceedings that the court ought not to admit it'.[49] To determine this issue, the Court will consider whether the breach rendered the evidence 'plainly unreliable or unfairly

49 Amanda Bowring, 'The CPS's Perspective on Identification Issues' (Speech delivered at the Workshop on Eyewitness Identification Evidence, London, 24 February 2006) <http://www.valentinemoore.co.uk/idworkshop/index.htm>; Judicial College, *The Crown Court Compendium Part 1: Jury and Trial Management and Summing Up* (May 2016).

prejudicial' to the accused.[50] Code D is not always followed by police. For example, in 2013 recognition evidence was held to be inadmissible (and the accused acquitted) when, in order to obtain evidence about the identity of an offender, one police officer sent a CCTV image to 'the private mobile number of a police officer who was at home and about to go to bed'.[51] If a trial judge finds that there has been a breach of Code D but admits the evidence, he or she will be required to give the jury a direction explaining the nature of the breach and inviting the jury to consider the possible effects of the breach.[52]

The growing body of case law dealing with the consequences of breaches of Code D indicates that much will depend on the nature of the breach and the effect it has on the ability of the fact-finder to assess the reliability of the recognition evidence. For example, in *R v JD*, the Court of Appeal held that recognition evidence given by a police officer was tainted and had the potential to cause significant unfairness.[53] In this case, the investigating police officer had approached the witness and asked if he knew the appellant. When the witness answered in the affirmative, he then asked if the witness could view CCTV footage of a violent incident in a pub which appeared to contain images of the appellant. The 'highly suggestive' background to the viewing of the footage and the investigating police officer's 'wholesale' and 'lamentable' failure to comply with any part of Code D led the Court of Appeal to hold that the evidence should have been excluded at the trial.

Conversely, in *R v Rogers*, the fact that a recognising police officer was aware that the appellant's DNA had been linked to the robbery in question prior to viewing the CCTV footage did not mean that the evidence was 'so tainted as to be excluded altogether'.[54] Further, despite the fact that there had been no compliance with Code D in respect of the police officer's evidence, it was held that the trial

50 *Lariba v The Queen* [2015] EWCA Crim 478, [46]; *R v Selwyn* [2012] EWCA Crim 1968.

51 Linda Fort, 'Burglary case blunder as police break evidence rule' *Get Reading* (online) 11 July 2013 *http://www.getreading.co.uk/news/local-news/burglary-case-blunder-police-break-5066779.*

52 *R v Forbes* [2001] 1 A Cr App R 430; *R v Harris* [2003] EWCA Crim 174.

53 *R v JD* [2012] EWCA Crim 2637, [28].

54 *R v Rogers* [2013] EWCA Crime 2406, [19].

judge did not err in holding that the evidence was admissible subject to proper jury directions.[55] Similarly, in *Lariba & Ors v The Queen*, the breach of Code D was insufficient to justify the exclusion of the evidence. In this matter, the investigating police officer attempted a formal recognition procedure with several witnesses but, being unaware of the new provisions of PACE governing the collection of recognition evidence, failed to ensure that there was a detailed contemporaneous note of the recognition procedure.[56] The Court held that the evidence was admissible for a number of reasons. First, the witness had made a statement after the viewing procedure which provided a record of the factual basis for the recognitions. Further, the judge had explained the breach to the jury and called for 'extreme caution' to be used when evaluating the evidence.[57]

The provisions of Code D of PACE that deal with recognition from images only apply to formal attempts to identify the offender (that is, when people are shown images and asked if they recognise anyone in the images).[58] They do not contain express guidance on the approach that police should adopt when a witness has recognised an offender from a 'spontaneous' viewing. In *Lariba*, the Court of Appeal held that in these circumstances, the police should arrange for the witness to undertake a formal viewing in accordance with the PACE Code D provision.[59] This would provide the jury with a means of testing the reliability of the evidence (albeit a limited one).

New Zealand

In New Zealand, the admissibility of visual identification evidence is governed by the Evidence Act 2006 (NZ). Visual identification evidence is defined as:

> (a) an assertion by a person, based wholly or partly on what that person saw, to the effect that a defendant was present at or near a place where

55 Ibid.
56 *Lariba v The Queen* [2015] EWCA Crim 478, [47].
57 Ibid, [47].
58 *Police and Criminal Evidence Act 1984 Code D*, 1.2(A).
59 *Lariba v The Queen* [2015] EWCA Crim 478, [45].

> an act constituting direct or circumstantial evidence of the commission of an offence was done at, or about, the time the act was done; or
> (b) an account (whether oral or in writing) or an assertion of the kind described in paragraph (a).[60]

While the definition is similar to that used in the *Evidence Act 1995* (NSW), it does not contain the additional stipulation in that Act that the witness' assertion be based on what the witness 'saw, heard or otherwise perceived *at that place or time*'. Accordingly, visual identification evidence may take the form of 'recognition by the eyewitness of someone already known to the witness (whether through personal contact or from photograph or film and whether or not the person is known by name to the witness)'.[61]

Section 45 of the Act governs the admissibility of visual identification evidence in criminal prosecutions and focuses on the reliability of the evidence. If a formal procedure was followed to obtain visual identification evidence, or there was good reason not to follow the procedure, the evidence is admissible unless the defendant proves on the balance of probabilities that it is unreliable.[62] If a formal procedure was not followed, and there was no good reason for not following it, the evidence is inadmissible unless the prosecution establishes beyond reasonable doubt that 'the circumstances in which the identification was made have produced a reliable identification'[63] A 'formal procedure' is one that occurs as soon as practicable after the offence is reported and involves the witness comparing the suspect to no fewer than seven people of similar appearance. In order to classify as a 'formal procedure', the witness must be given no indication as to who is the suspect in the procedure and must be informed that the offender may or may not be among the people in the procedure. Further, the police officer conducting the procedure must provide a sworn written record of the procedure to the defendant

60 *Evidence Act 2006* (NZ) s 4.
61 *Harney v New Zealand Police* [2011] NZSC 107.
62 *Evidence Act 2006* (NZ) s 45(1).
63 Ibid, s 45(2).

and the Judge and a pictorial record must be kept to demonstrate what the witness looked at during the procedure.[64]

Section 45(4) of the Act contains the following list of good reasons for not following a formal procedure:

> (a) a refusal of the person to be identified to take part in the procedure (that is, by refusing to take part in a parade or other procedure, or to permit a photograph or video record to be taken, where the enforcement agency does not already have a photo or a video record that shows a true likeness of that person):
> (b) the singular appearance of the person to be identified (being of a nature that cannot be disguised so that the person is similar in appearance to those with whom the person is to be compared):
> (c) a substantial change in the appearance of the person to be identified after the alleged offence occurred and before it was practical to hold a formal procedure:
> (d) no officer involved in the investigation or the prosecution of the alleged offence could reasonably anticipate that identification would be an issue at the trial of the defendant:
> (e) if an identification of a person alleged to have committed an offence has been made to an officer of an enforcement agency soon after the offence was reported and in the course of that officer's initial investigation:
> (f) if an identification of a person alleged to have committed an offence has been made to an officer of an enforcement agency after a chance meeting between the person who made the identification and the person alleged to have committed the offence.

In *Harney v The Police*, the Supreme Court of New Zealand held that the above list was not exhaustive and that, in the case of recognition evidence, the fact that the accused was already known to the witness could constitute a further good

64 Ibid, s 45(3)(a)–(g).

reason for not following a formal procedure.[65] The issue to consider when interpreting the provision was whether following a formal procedure would serve a useful purpose on the facts of the individual case.[66] In the case of recognition evidence, the Court held that a formal procedure would likely serve a useful purpose where the witness had limited prior familiarity with the accused, where the accused disputed that he or she was known to the witness, or where the last contact between the witness and the accused was not recent.[67]

In order to determine whether visual identification evidence is unreliable (pursuant to s 45(1)), the court can take into account all relevant circumstances,[68] including those that go beyond the circumstances of identification (such as the presence of other incriminating evidence).[69] To determine whether evidence is reliable (pursuant to s 45(2)), the Court can only consider the circumstances in which the identification was made, which includes witness factors, external factors, and the method of gathering the identification evidence,[70] and is not permitted to take into account the strength of other evidence.[71] If the evidence has been tainted in any way by suggestion, it will be difficult for the prosecution to establish it is reliable.[72]

Options for reform

The approaches outlined above provide examples of different ways in which to attempt to regulate the collection and use of recognition evidence from CCTV images. This section utilises this material when examining the possible solutions to the identified need to exercise greater control over the admissibility and use of

65 *Harney v New Zealand Police* [2011] NZSC 107, [26]. See also *R v Edmonds* [2009] NWCA 303, [65].
66 *Harney v New Zealand Police* [2011] NZSC 107 [26]. See also *R v Edmonds* [2009] NWCA 303, [65].
67 *Harney v New Zealand Police* [2011] NZSC 107 [26].
68 Ibid, [32]; *R v Edmonds* [2009] NWCA 303.
69 *R v Aleki* [2010] NZCA 442; *R v Gwaze* [2010] NZSC 52.
70 *Harney v New Zealand Police* [2011] NZSC 107; *R v Edmonds* [2009] NWCA 303.
71 *Lord v The Queen* [2011] NZCA 117; *R v Edmonds* [2009] NWCA 303.
72 See, eg, *Lord v The Queen* [2011] NZCA 117; *Police v Clifton* DC Dunedin CRI-2010-012-004152 20 October 2010).

recognition evidence based on CCTV images in NSW and the other uniform Evidence Act jurisdictions.

Discouraging the use and admission of unreliable recognition evidence

In *R v Brease*, when discussing the admissibility of evidence that a person in CCTV images shared similarities with the accused, the court observed that 'trial judges and prosecutors should take care in admitting or calling evidence of this kind where it is not persuasive and of questionable weight'.[73] As this parenthetical comment recognises, one approach to the regulation of recognition evidence based on CCTV images is to place the onus on those involved in criminal prosecutions to refrain from adducing or admitting potentially unreliable evidence. However, this approach is problematic for a number of reasons. First, one of the major difficulties with recognition evidence based on images is that it often appears highly probative, particularly when the witness has extensive prior familiarity with the accused, and many of the factors that go to the weight of the evidence, such as whether the identity of the person in the image was suggested to the witness prior to his or her act of recognition, may be unknown to those involved in the criminal proceedings. Accordingly, it will not be immediately apparent to legal practitioners and judges that the evidence is of 'questionable weight'.

Second, even if the factors which may undermine the evidence are known to the prosecutor, he or she acts as a representative of the state and is obliged to call all witnesses whose evidence 'is necessary to unfold the narrative and give a complete account of the events upon which the prosecution is based'.[74] While a prosecutor is not bound to call a witness whose evidence he or she considers to be 'unreliable, untrustworthy or otherwise incapable of belief',[75] it will be necessary for a prosecutor to point to an adequate basis for the conclusion that the evidence

73 *R v Brease* [2013] QCA 249, [29].
74 *Whitehorn v The Queen* [1983] HCA 42, [16] (Dawson J). See also *R v Apostilides* [1984] HCA 38; *R v Kneebone* [1999] NSWCCA 279.
75 *Whitehorn v The Queen* [1983] HCA 42, [16] (Dawson J).

to be given by the witness was not reliable.[76] As the full bench of the High Court noted in *R v Apostilides*, '[s]uch occasions are likely to be rare. The unreliability of the evidence will only suffice where there are identifiable circumstances which clearly establish it; it will not be enough that the prosecutor merely has a suspicion about the unreliability of the evidence'.[77] Accordingly, the fact that recognition evidence is of uncertain or even dubious reliability will not generally be sufficient reason for a prosecutor to decide not to adduce it in a criminal prosecution.

Finally, the ability of a judicial officer to 'take care' in permitting the admission of evidence of dubious weight is limited in uniform Evidence Act jurisdictions. The reliability of evidence is not a factor to be considered when determining its relevance,[78] and cannot be considered when determining its 'probative value' pursuant to ss 135 or 137 of the Act.[79]

Another way to informally place the responsibility for ensuring the reliability of the evidence on stakeholders in the criminal justice system is to adopt an approach similar to that taken in Canada. As can be seen from the above discussion, the Canadian approach is essentially a self-regulatory one. Two primary stakeholders in the criminal justice system—the police and the prosecution service—have voluntarily adopted recommendations about the collection and handling of identification evidence. A failure to comply with the recommendations does not have any enforceable consequences but will inevitably highlight potential deficiencies in the evidence. These may form the basis of an application for the evidence to be excluded in the exercise of judicial discretion or result in the giving of a judicial direction about impact that non-compliance with the recommendations may have had on the trustworthiness of the evidence.

76 *R v Kneebone* [1999] NSWCCA 279, [50].
77 *R v Apostilides* [1984] HCA 38, [15].
78 Relevant evidence is 'evidence that, if it were accepted, could rationally affect (directly or indirectly) the assessment of the probability of the existence of a fact in issue in the proceeding': *Evidence Act 1995* (NSW) s 55(1).
79 *IMM v The Queen* [2016] HCA 14.

There are a number of arguments that could be made in support of adopting an approach such as that taken in Canada to recognition evidence based on images. Non-binding standards or codes of practice developed or adopted by policing and prosecution agencies can be amended easily. As such, they can accommodate developments in the psychological literature regarding the best approach to recognition evidence from images. In addition, the voluntary nature of the standards or codes of practice enables them to be adapted by policing agencies so that they suit local policing conditions. Further, while not having legislative force, a publicly available standard or code of practice can raise awareness among all stakeholders in the criminal justice system about the best-practice methods of collecting and using recognition evidence. And finally, a failure to comply with the standards or code could lead to the evidence being excluded under s 138 of the *Evidence Act 1995* on the basis that it was improperly obtained and, in light of the impropriety, it is considered undesirable to admit it in a criminal prosecution.[80]

However, the Canadian approach also has a number of disadvantages. Unless the code or guidelines were universally accepted by policing agencies in all uniform Evidence Act jurisdictions, there would be a divergence of approach with respect to the way recognition evidence based on CCTV images is gathered by investigating officers in different states and territories. Further, the non-binding nature of the code may lead to it being ignored or flouted given the apparent lack of consequences of any non-compliance.

Amending existing provisions of the Act

A second option for reform is to amend the existing provisions of the *Evidence Act 1995* (NSW) to ensure that they extend to recognition evidence based on CCTV images. As discussed in the previous chapter, recognition evidence based on CCTV images does not fall within the ambit of the identification provisions of the Act. Accordingly, it may be possible simply to amend the definition of

80 Section 138 of the *Evidence Act 1995* (NSW) deals with the exclusion of improperly or illegally obtained evidence.

'identification evidence' so that it extends beyond eyewitness identification evidence and also encompasses evidence of post-offence acts of recognition from images. If the definition of 'identification evidence' were to be amended in this way, the legislative provisions that aim to ensure the accuracy of identification evidence—sections 114 and 115 of the Act—would also apply to recognition evidence based on CCTV images.

While this proposal is attractive in its simplicity, it does not provide a complete or satisfactory solution to the problem of controlling the admissibility and use of recognition evidence based on CCTV images. The accuracy of eyewitness identification evidence and recognition evidence generally cannot be tested in the same way. In the case of eyewitness evidence, the test is whether the witness can recall the appearance of the offender so as to establish his or her identity. In the case of recognition evidence, however, the question is not whether the witness can recall the appearance of the offender, but rather whether the witness is correct when he or she claims that the offender was a particular person. These two different questions—who was the offender, or was the witness correct when he or she recognised the offender—must be tested in different ways.

Traditionally, an identification parade has been thought to be the best method of testing an eyewitness' memory for the appearance of an offender (although it has been noted that there are many advantages to a picture identification procedure).[81] However, neither the line-up or the picture identification procedure (or any of the other identification procedures, such as show ups or crowd scene identifications) are of any great utility when attempting to ascertain the accuracy of the evidence of a witness who knows the offender and who claims to recognise him or her in an image. The witness already knows the suspect, and hence he or she will generally have no difficulty in selecting the suspect from a group of other individuals. As the ALRC noted in its final report which led to the introduction of the *Evidence Act 1995* (NSW) , 'if the eyewitness saw someone he or she knew committing the

81 See, eg, Neil Brewer, *Picture Perfect: Why Photo Lineups Can Be Better At Catching Crooks* (26 May 2011) The Conversation <https://theconversation.com/pictures-perfect-why-photo-lineups-can-be-better-at-catching-crooks-1217>.

crime, there would be little point in holding a parade'.[82] Indeed, the courts have on occasion noted that any identification evidence gathered as a result of the conducting of an identification parade after a witness has previously recognised an offender may be challenged by the defence on the basis that it was contaminated by the earlier act of recognition.[83]

There may be some cases, however, where an identification parade could be useful to confirm the identity of the person the witness claimed to recognise in the CCTV images. In *R v Coe*, for example, the NSW Court of Criminal Appeal held that evidence of a picture identification procedure held after a witness had recognised an offender at the time of the offence was admissible, noting that 'if [the witness] had picked out someone else's photograph, or not picked out any in the array, it would have been highly significant'.[84] It does not appear, however, that mandating the use of an identification parade in respect of recognition evidence based on CCTV images represents a practical or useful way in which to attempt to control its quality.

Introducing binding or enforceable rules

A third approach to reform is to introduce new and enforceable rules about the collection and handling of recognition images based on CCTV images. As discussed above, in England and Wales, the relevant provisions are included in a Code of Practice issued by the Secretary of State under Part VI of the *Police and Criminal Evidence Act 1984* (UK). While failure to comply with a provision of a code does not render a police officer liable to any criminal or civil proceedings,[85] it may make the officer liable for a disciplinary offence.[86] Further, the content of a code of practice may be admissible in evidence and taken into account in a

82 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [187].
83 *Director of Public Prosecutions v Donald* [1999] NSWSC 949, [11]; *R v Leroy* [2000] NSWCCA 302, [18].
84 *R v Coe* [2002] NSWCCA 385, [27].
85 *Police and Criminal Evidence Act 1984* (UK), s 67(10).
86 Richard Stone, *Textbook on Civil Liberties and Human Rights* (Oxford University Press, 10th ed, 2014), 90.

prosecution if it is relevant to any question arising in the proceedings.[87] In the case of recognition evidence based on CCTV images, a breach of Code D of PACE may result in evidence being excluded in a criminal prosecution.[88]

One advantage of a binding code of practice is the attempt to ensure a uniformity of approach to the collection of evidence. Police officers from all police stations in a jurisdiction must comply with the code of practice, regardless of the views of individual police officers, local conditions, or resourcing constraints. Further, as David Dixon notes, the codes issued under PACE have 'statutory authority and weight' and as such there has been 'extensive judicial consideration of their requirements and implications'[89] However, they can also be amended more readily than primary legislation, and have already undergone a number of revisions to take into account experience of the way they operate in practice.

An alternative to a binding code of practice is to regulate the collection and handling of recognition evidence based on CCTV images by way of primary or subordinate legislation. As discussed above, s 45 of the *Evidence Act 1996* (NZ) governs the police procedures utilised to collect identification evidence (including recognition evidence) in New Zealand. The provision encourages police to conduct a formal identification procedure as a failure to do so increases the likelihood that the evidence will be inadmissible in a later criminal prosecution. The legislation prescribes certain minimum requirements that must be met in order for an identification procedure to classify as a 'formal procedure'.

The inclusion of investigative requirements in primary legislation increases transparency, ensures consistency of approach among police officers in the jurisdiction and performs an educative role by drawing attention to the various factors which may reduce the reliability of the evidence. It also satisfies the principle that 'rules that have a significant impact on individual rights and liberties' and 'provisions imposing obligations on ... organisations to undertake

87 *Police and Criminal Evidence Act 1984* (UK), s 67(11).
88 See discussion above.
89 David Dixon, 'Reform of Policing by Legal Regulation: International Experience in Criminal Investigation' (1996) 7(3) *Current Issues in Criminal Justice* 287, 292.

certain activities ... or desist from certain activities' should generally be in primary, not subordinate, legislation'.[90] Including the requirements in regulations, on the other hand, may have the added benefit of enabling more detail to be added to the rules and ensuring that there is greater flexibility to amend them if and as required.[91]

The preferable approach

An approach similar to that taken in New Zealand is consistent with that already taken in the *Evidence Act 1995* (NSW). The Act already imposes minimum standards on police officers when it comes to the collection of eyewitness identification evidence. It establishes a prima facie requirement for identification evidence to be collected by way of an identification parade[92] and generally require identifications to be made without the witness having been 'intentionally influenced to identify the defendant.'[93] Further, the provisions already link compliance to admissibility, so that non-compliance with the provisions has the consequence that the evidence is inadmissible as evidence in the prosecution. As such, it is likely that the introduction of a similar provision relating to recognition evidence into the Act would be easily accepted by police officers, legal practitioners and judicial officers who are already familiar with the existing provisions relating to identification evidence.

That said, while the *Evidence Act 1996* (NZ) and the uniform Evidence Acts contain high-level guidance about identification procedures, they do not outline in any detail the way an identification parade or picture identification procedure is to be conducted in practice. Given the myriad of factors that may affect the quality of recognition evidence based on CCTV images, detailed guidance is needed regarding to precise procedures to be followed by police officers who conduct

90 Australian Government Department of Prime Minister and Cabinet, *Legislation Handbook* (2009), [1.12].

91 See Australian Law Reform Commission, *Traditional Rights and Freedoms—Encroachments by Commonwealth Laws*, Report No 129 (2016), ch 17.

92 *Evidence Act 1995* (NSW) s 114.

93 Ibid, s 114(1). Note, however, that this requirement is not present in s 115.

recognition procedures with potential witnesses. The implementation of a relevant provision in the uniform Evidence Acts would ensure a consistent approach to this type of evidence among the uniform Evidence Act jurisdictions. On the other hand, such a provision would not sit comfortably in the larger scheme of the Act, which is focused on evidentiary issues as opposed to law enforcement practice and procedure.[94]

An alternative approach could be to set certain minimum standards in respect of the collection and handling of recognition evidence in the uniform Evidence Acts, and provide more detailed guidance in legislation dealing with police powers and responsibilities; such an approach has been taken to eyewitness identification evidence at the federal level. While the *Evidence Act 1995* (Cth) contains identical identification evidence provisions to the other uniform Evidence Act jurisdictions, the *Crimes Act 1914* (Cth) supplements them with detailed rules about the conduct of identification parades. For example, the *Crimes Act 1914* stipulates that an identification parade:

- must consist of at least nine people who all resemble the suspect in age, height and general appearance;[95]
- should not be generally conducted by a police officer who has taken part in the investigation;[96]
- should be recorded by way of video recording if it is practicable to do so;[97] and
- should be preceded by the giving of certain instructions to the witness.[98]

If this approach were adopted in NSW, the *Evidence Act 1995* (NSW) could contain a provision requiring, as a pre-condition of admissibility of recognition evidence based on images, that:

94 See Stephen Odgers, *Uniform Evidence Law* (Thomson Reuters, 10th ed, 2010), [1.1.40].
95 *Crimes Act 1914* (Cth) s 3ZM(6)(a),(b).
96 Ibid, s 3ZM(6)(c).
97 Ibid, s 3ZM(6)(l).
98 Ibid, s 3ZM (6)(K).

(a) a recognition procedure be performed (unless it would be unreasonable to do so); and
(b) the act of recognition was made without the witness being intentionally influenced to recognise the accused.

A provision of the *Law Enforcement (Powers and Responsibilities Act) 2002* (NSW) or the *Criminal Procedure Act 1988* (NSW) could then contain more detailed guidance on how to conduct the recognition procedure.

At this point, it should be noted that introduction of new legislative provisions governing the collection of recognition evidence from images will have cost implications. The conduct of recognition procedures will take additional time and require further resources (such as audio-visual recording equipment). As was noted in ALRC 102, however, identification parades have not created an unreasonable burden on police.[99] Indeed, when researching legal regulation of criminal investigations, policing scholar David Dixon noted that the majority of police officers interviewed in England about the PACE codes appreciated the guidance they provided as to what policing techniques or procedures were legitimate and appropriate and which were not.[100] In any event, any additional costs associated with the provisions are necessary to prevent miscarriages of justice, which themselves carry huge costs to individuals, communities and the legitimacy of the criminal justice system. Further, they should be considered in light of the costs caused by uncertainty about the appropriate way to collect and handle the evidence, such as costs associated with the need for pre-trial and appellate litigation about the admissibility of the evidence.

99 Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Uniform Evidence Law*, Report No 102 (2005), [13.55].

100 David Dixon, 'Reform of Policing by Legal Regulation: International Experience in Criminal Investigation' (1996) 7(3) *Current Issues in Criminal Justice* 287, 289.

A new legislative provision

It is important that any new provision or series of provisions outlining the procedures to be followed when collecting recognition evidence based on CCTV images be drafted in consultation with police ('as a way of encouraging responsibility and challenging cynicism'),[101] as well as other relevant stakeholders. As noted by the ALRC in its interim report on evidence, any controls imposed on identification evidence must balance the 'positive impact on accurate factfinding and on the minimisation of the risk of wrongful convictions against any negative impact they may have on the time, cost and effectiveness of criminal trials and law enforcement'.[102] By virtue of their knowledge and experience, experts with backgrounds in fields such as psychology will be able to provide valuable input on the impact of any rules on the accuracy of the evidence, while those involved in the criminal justice system—police officers, legal representatives and judicial officers—are uniquely placed to comment on the impact of any proposed reform on the efficient and effective functioning of the courts. However, law reforms should reflect research-based best practices, and as such certain key issues should be included in the legislation. This section analyses those key issues, with a view to highlighting matters which should be included in any legislation regarding police procedures in this area.

Formal viewing procedures

The following section discusses the issues that investigating police should consider when organising a formal recognition procedure. It highlights issues which may affect the quality of recognition evidence based on CCTV images at a number of stages in the investigative process, including when selecting potential witnesses, administering the recognition procedure, and recording the results of the procedure.

101 Ibid, 300.
102 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [829].

Organising the viewing

The first key issue is the method that is adopted to identify potential 'recognisers'. It is important that that the process of selection of potential recognition witnesses is not unnecessarily suggestive—that is, it does not expressly or impliedly indicate the identity of the person who is suspected to be visible in the images. In some instances, it may be difficult to establish whether a person is familiar with a suspect without first questioning them about their knowledge of the person. In these cases, it may be impossible to avoid inferring that the suspect is thought to be a person depicted in the CCTV images. In these situations, consideration could be given to showing the witness multiple pieces of CCTV footage of a similar nature. This procedure was suggested in *R v Theos*, where, after noting that the witness had been informed of the identity of the suspect prior to viewing the CCTV images, the court noted that he was not shown any other photographs, for example, photographs 'of other bank robberies which would no doubt be in police possession and which may have enabled him to attempt an identification more objectively and fairly.'[103]

If possible, however, a potential witness' prior familiarity with a suspect should be determined through intelligence gathering that does not run the risk of contaminating the recognition evidence. For example, police and court records, as well as information from other more informal sources, including friends and colleagues of the witness, could be used to determine whether or not a particular witness may possess sufficient prior familiarity with a suspect to be asked to view CCTV images of an offence or act associated with an offence. The person could then be shown the footage without being provided with any information about the suspect or the nature of the offence (unless this is apparent from the footage).

Another issue, not explicitly addressed in Code D of PACE, relates to how many potential recognition witnesses should be shown the relevant CCTV images. In the case of eyewitness identification evidence, the answer to this question is usually pre-determined by the circumstances of the offence. In other words, there

103 *R v Theos* (1996) 89 A Crim R 486, 504 (Smith AJA).

is typically a finite pool of potential eyewitnesses from whom to gather evidence. In the case of recognition evidence from images, however, there will often be a much larger cohort of potential witnesses. It may be that the matter is best left to police discretion on a case-by-case basis. The gathering of recognition evidence from images could be affected by many practical factors (such as the willingness of witnesses to assist in the process, as well as resource or time constraints). However, it may also be possible to suggest that evidence be gathered from multiple witnesses, or a representative sample, if possible and practicable. In *Lariba*, for example, five police officers claimed to recognise the appellant from CCTV images. A further eight officers, however, viewed the images at a formal viewing session and were unable to recognise anyone in the images.[104] The defence were able to demonstrate, therefore, that not all of the police officers who knew the appellant were able to recognise him from the images.[105] While it is possible for multiple witnesses to be incorrect in their recognition of an offender, the weight to be given to recognition evidence may be affected by how many witnesses who were familiar with the suspect claim to be able to recognise him or her in the images.

Preventing contamination

One of the main aims of any provision regulating the collection of recognition evidence from CCTV images should be to preserve the quality of the evidence. Like eyewitness identification evidence, recognition evidence may be frail and easily contaminated by suggestion, feedback, bias or post-offence knowledge. For this reason, it is important that the provision contains guidelines such as those in Code D of PACE governing the precise manner in which a recognition procedure should be conducted.

As noted above, to minimise suggestion, it is necessary that a potential witness is unaware of the potential identity of an offender prior to the viewing session. Further, they should be given specific instructions regarding the conduct of the

104 *Lariba v The Queen* [2015] EWCA Crim 478, [22].
105 Ibid, [47].

procedure. Research has demonstrated that witness instructions are 'one of the most useful techniques for enhancing the reliability of identifications'.[106] While they result in a slight reduction of correct identifications, they are more effective in reducing false identifications.[107] When a witness is asked to view CCTV imagery, he or she should receive standardised information about the process that aims to reduce the pressure on the witness to identify someone and seeks to preserve the quality of the evidence. For example, the witness could be informed that he or she may or may not recognise someone in the imagery; that the administrator of the procedure is not aware of the identity of any person in the images or is not permitted to provide any guidance to the witness about the possible identity of any person shown in the images; and that the investigation into the offence will continue if the witness is unable to identify any person in the images.[108]

In addition to witness instructions, any recognition procedure should be double blind or blinded to prevent the witness from gathering clues from the administrator as to which person he or she is expected to recognise.[109] Double blind testing has been described as 'the single most important characteristic that should apply to eyewitness identification'.[110] In the case of recognition evidence, it is just as important to prevent intentional or unintentional suggestion during the recognition procedure. If a witness is made aware by 'words, gestures, hesitations, smiles' or by any other means of the person he or she is expected to recognise, it is possible that the or she will engage in a process of deduction to determine who the person most looks like out of the witness' friends, family members and acquaintances.

106 Special Master, Supreme Court of New Jersey, *State of New Jersey v Henderson: Report of the Special Master* (2008), 23.

107 Ibid, 23–24.

108 See The Innocence Project, *The Causes of Wrongful Conviction* <http://www.innocenceproject.org/causes-wrongful-conviction>.

109 A 'blind' or 'double blind' procedure is one in which the administrator is not aware who the suspect is; while a 'blinded' procedure is one in which the administrator who knows the identity of the suspect is shielded from the material being viewed by the witness and as such cannot intentionally or unintentionally influence the witness' selection: Ibid.

110 Gary Wells, cited in Special Master, Supreme Court of New Jersey, *State of New Jersey v Henderson: Report of the Special Master* (2008), 19.

Any recognition procedure should also ensure that witnesses view the images in isolation to prevent one witness' recognition being influenced by the views of another witness. Consideration should also be given to eliminating background details or other contextual cues that may suggest the identity of the person in the images, thereby minimising the probative value of the recognition. For example, it may be necessary to blur or eliminate the background of an image if it revealed the location of an offence and the location would trigger the witness' knowledge of the details of the offence (including who was suspected of committing it). It is possible, however, that the manipulation of CCTV imagery in this manner may be problematic in certain circumstances, and further consideration should be given to its appropriateness during any reform process.

Finally, no feedback should be given to the witness who recognises a person in CCTV images. Psychological research has demonstrated that a witness' confidence in his or her identification can be tainted by post-identification feedback from official or non-official sources.[111] It is logical to assume that the same is the case with acts of recognition, and that providing a witness with information that, for example, another witness concurred with his or her view about the identity of the suspect, or that there was other compelling evidence linking the suspect to the offence, would elevate the witness' confidence in his or her evidence, making it more difficult to test and weigh at the prosecution stage.

Preserving a record of the recognition procedure

Another main aim of any provision regulating the collection of recognition evidence from CCTV images is to facilitate the testing of the reliability of the evidence during a criminal prosecution . Accordingly, at the time the formal procedure is conducted, a record should be made of any factor or factors which may have influenced the witness viewing the images, including whether the person 'knew or was given information concerning the name or identity of any suspect' and '[h]ow and by whom the witness was asked the view the image or

111 Ibid, 37.

look at the individual'.[112] Details of the actual procedure should also be recorded, such as the place, date and time it was conducted and the identity of the person conducting the procedure.

It is highly desirable that any such record be made using audio-visual recording technology. As Gibbs CJ noted in *Alexander v The Queen*, a benefit of holding an identification parade when collecting eyewitness evidence is that it is held in the presence of the accused, 'who is thereby enabled to observe, and later bring to light, any unfairness in the way in which the parade was conducted, or any weakness in the way in which the witness made the identification'.[113] While a recognition procedure would obviously not be conducted in the presence of the accused, an audio-visual recording of the procedure will provide the accused with similar opportunities to test the evidence. In particular, it will enable an accused (and the fact-finder) to observe a myriad of details that may have an impact on the probative value of the evidence, including: the words used by the person administering the procedure; the speed with which the witness made the recognition (a factor known to be indicative of reliability in relation to eyewitness identification evidence);[114] the words used by the witness; and the witness' facial expressions, gestures and tone of voice.[115] In addition, it has the ancillary benefits of deterring police misconduct and discouraging the making of unfair and false allegations about police behaviour.[116]

The case law suggests that police in NSW may already be recording some recognition procedures using audio-visual technology. In *Nguyen v The Queen*, for example, the court was shown a video recording of a recognition witness watching CCTV footage and identifying the people in the footage. This recording was of utility to the court in the assessment of the value of the evidence, with the

112 *Police and Criminal Evidence Act 1984 Code D*, [3.36(a)], [3.36(c)].
113 *Alexander v The Queen* [1981] HCA 17, [6] (Gibbs CJ).
114 Special Master, Supreme Court of New Jersey, *State of New Jersey v Henderson: Report of the Special Master* (2008), [65.780]; Martine Powell, Maryanne Garry and Neil Brewer, 'Eyewitness Testimony' in Ian Freckelton and Hugh Selby (eds), *Expert Evidence* (Law Book Co, Online ed, 2016) [65.05].
115 *Police and Criminal Evidence Act 1984 Code D*, [3.36(k)].
116 David Dixon, '"A Window into the Interviewing Process?" The Audio-Visual Recording of Police Interrogation in New South Wales, Australia' (2006) 16(4) *Policing and Society* 323, 328.

trial judge holding that the witness' identifications were 'spontaneous and positive'.[117] When recording a recognition procedure, consideration should be given to precisely what is recorded. For example, multiple cameras could be used to produce a split image that simultaneously shows the witness and the administrator to avoid any doubt about the nature of any interaction between the two during the recognition procedure.

A final issue to be considered when preserving a record of the recognition is whether or not a witness should be required to give a post-recognition confidence statement. Currently, the eyewitness identification literature reveals that there is some debate about whether a witness' report of confidence bears any relationship to the veracity of his or her evidence. In *State of New Jersey v Henderson: Report of the Special Master* it was noted that a post-identification report of confidence 'is not a reliable indicator of accuracy'.[118] On the other hand, Ian Freckleton, legal scholar and barrister, argues that 'confidence provides a reasonable indication as to whether the identification response is likely to be correct if confidence is assessed immediately after the identification response'.[119] It may be that that it is ultimately unnecessary to include any requirement that a witness be asked about his or her confidence as the record of the recognition procedure will demonstrate it through the witness' words and actions. Alternatively, the issue could be determined when there is a reasonable degree of consensus among scholars about the utility of the procedure.

Informal viewing and spontaneous recognition

Recognition evidence will not always be collected during a formal police procedure. In many cases, the recognition will be spontaneous and unrecorded. In *R v Moss*, for example, an off-duty police officer recognised an offender after he

117 *Nguyen v The Queen* [2007] NSWCCA 363 [48].

118 Special Master, Supreme Court of New Jersey, *State of New Jersey v Henderson: Report of the Special Master* (2008), 35.

119 Martine Powell, Maryanne Garry and Neil Brewer, 'Eyewitness Testimony' in Ian Freckelton and Hugh Selby (eds), *Expert Evidence* (Law Book Co, Online ed, 2016) [65.05], [65.780].

'happened to pass a computer screen on which a civilian colleague was viewing CCTV images of a burglary in progress'.[120] However, spontaneous recognition of offenders is largely due to widespread dissemination of CCTV images of suspects to other police officers and the public. As discussed in Chapter 2, CCTV images are commonly circulated internally among police officers and externally to the general public to assist in the identification of offenders. The situation is similar in other jurisdictions. For example, in England, this practice is explicitly sanctioned by PACE Code D, which states that 'nothing in this Code inhibits showing films, photographs or other images to the public through the national or local media, or to police officers for the purposes of recognition and tracing suspects'.[121] In England it is common practice for at least one police officer in a borough division to be employed 'on the dedicated full-time duty of scrutinising CCTV video imagery of recent local offences, or stills, derived from such footage, and comparing it with high quality official photographs of known local offenders in order to try to establish a match'.[122] Further, a dedicated unit of police 'super recognisers' regularly cross-reference a database containing 'more than a hundred thousand images of unidentified suspects ... each with its own six-digit code' with mug shots of people who have been arrested.[123]

However, the spontaneous recognition of suspects from CCTV images is not always in response to the viewing of imagery controlled and released by the police. Images from private surveillance systems may be released by individuals via social media, or viewed by employees for a variety of purposes (for example, correctional services officers may view CCTV images of offences in order to conduct disciplinary proceedings in response to an incident).[124]

120 *R v Moss* [2011] EWCA Crim 252.
121 *Police and Criminal Evidence Act 1984 Code D*, [3.28].
122 David Wolchover, *Visual Identification Procedures Under PACE Code D*, 38 <www.DavidWolchover.co.uk >.
123 Patrick Radden Keefe, 'The Detectives Who Never Forget a Face', *The New Yorker* (online), 22 August 2016 <http://www.newyorker.com/magazine/2016/08/22/londons-super-recognizer-police-force>.
124 National Research Council of the National Academy of Sciences, *Strengthening Forensic Science in the United States: A Path Forward* (National Academies Press, 2009), 20.

The spontaneous viewing of CCTV images by potential witnesses may result in the acquisition of recognition evidence that may be contaminated (if, for example, the circumstances of the viewing were not controlled) or difficult to test at trial. For example, in *R v Poile*, an image of an offender wanted for the attempted robbery of a taxi driver was released on Facebook by the Australian Capital Territory police. The Facebook exchange on the possible identity of the offender was recorded on the ACT Policing Facebook page. The witness who later claimed to recognise the offender wrote, 'It's that the dirty kid that lives in Osburn, I think. What's his name?', to which another friend responded 'Looks like that Ryan kid'.[125] In cases such as these, where the recognition of the offender may have been contaminated by suggestion, it would be desirable, where possible, to attempt to collect additional recognition evidence from other witnesses in a formal viewing session that complies with the requirements of any legislative provisions.[126] Further, as was held in *Lariba*, police officers should to take steps to record the matters outlined in the relevant legislation as soon as possible after being made aware of the spontaneous recognition.

A new judicial direction

In its 1985 interim report on evidence, the ALRC recommended a combination of approaches to the problem of eyewitness identification evidence. In addition to recommending provisions that aimed to enhance the quality of the identification evidence adduced in criminal prosecutions, it also recommended that 'the existing powers of directing juries should be strengthened'.[127] As a result of these recommendations, s 116 was included in the Act.

The ARLC's approach remains apposite today. Accordingly, if recognition evidence based on CCTV images is to be better regulated to reduce the risk of wrongful convictions, judicial officers should be required to direct juries about the special need for caution before accepting the evidence and the reasons for that

125 *R v Poile* [2016] ACTSC 262, [33]–[40].
126 David Wolchover, *Visual Identification Procedures Under PACE Code D*, 39 <www.DavidWolchover.co.uk >.
127 Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985), [846].

need for caution. This could be achieved by simply amending s 116 to ensure it applies to recognition evidence that is based on a post-offence viewing of CCTV images. A direction similar to that used for eyewitness recognition evidence could then be given in cases where the recognition is based on images. As with identification evidence, no particular form of words should be stipulated in the provision, and guidance may be drawn from the common law and the existing direction relating to eyewitness recognition evidence as to the appropriate content of the direction. As the High Court held in *Domican v The Queen*, the adequacy of any warning should be evaluated having regard to four factors:

(i) the opportunity to observe the person identified;
(ii) the length of time between the incident and the identification;
(iii) the nature and circumstances of the identification; and
(iv) 'the nature of the relationship between the witness and the person identified'.[128]

If the circumstances of the recognition indicate there is little scope for any error, the need for a comprehensive judicial direction about the recognition evidence may be greatly reduced.

Conclusion

In the context of eyewitness identification evidence, psychologists Gary Wells and Deah Quinlivan have noted that a joint effort between science and the law 'should be able to create a system that provides stronger incentives to eliminate unnecessarily suggestive procedures without excluding reliable identifications'.[129] This chapter has argued that in uniform Evidence Act jurisdictions, these 'incentives' should take the form of legislation governing the collection and handling of recognition evidence based on CCTV images. While this legislation

128 *Domican v The Queen* [1992] HCA 13, [20] (Mason CJ, Deane, Dawson, Toohey, Gaudron and McHugh JJ).

129 Gary L Wells and Deah S Quinlivan, 'Suggestive Eyewitness Identification Procedures and the Supreme Court's Reliability Test in Light of Eyewitness Science: Thirty Years Later' (2009) 33(1) *Law and Human Behavior* 1, 21.

may reduce the amount of relevant information produced to the fact-finder, it is consistent with the inherent bias of the criminal justice system towards the accused that is necessary to minimise the risk of wrongful convictions. While the precise content and location of the rules should be determined after widespread consultation with psychologists and stakeholders in the criminal justice system, the provisions should aim to regulate the 'system variables' that can affect the reliability of the evidence, including the knowledge of the witness and the administrator of the procedure, the instructions given to recognition witnesses, the way the procedure is conducted, and the feedback given to recognition witnesses after the procedure. To further promote the aims of the uniform Evidence Acts—that is, to promote accurate fact-finding, ensure fairness to the parties and minimise the risk of wrongful convictions—judicial officers should be required to give a direction about the evidence when it is adduced in a criminal prosecution. The content of the direction should be tailored to the circumstances of the case and the degree of danger that the fact-finder will misestimate the value of the evidence.

7. CCTV IMAGES, THE FACT-FINDER AND UNFAMILIAR FACE RECOGNITION

> Thinking with pictures—looking at them, trying to interpret them, and using them to reach decisions—is very different from thinking with words alone. Understanding them requires new skills.[1]

Introduction

In New South Wales and other Australian jurisdictions it is common practice to allow the fact-finder to compare CCTV images of an offender with the accused in the courtroom.[2] This comparison can then assist the fact-finder to determine whether the offender in the images is the same person who has been charged and prosecuted for the offence. In some cases, if other evidence relating to identification is not adduced, this process of comparison may form the sole basis of the fact-finder's conclusion that the accused was the person who committed the offence. Several legal scholars and psychologists have questioned the wisdom of this practice, arguing that research has demonstrated that the process of comparing images is error-prone[3] and that jurors should be warned about the danger of basing a conviction on a conclusion that a person depicted in images appears to be the same person as the accused.[4]

This chapter builds on this scholarship by undertaking a closer examination of the practice of permitting jurors to determine identity on the basis of the comparison of images and an accused in NSW. It begins by noting the lack of statutory

1 Neal Feigenson and Christina Spiesel, *Law on Display: The Digital Transformation of Legal Persuasion and Judgment* (New York University Press, 2009), xi.

2 In this chapter, the term 'fact-finder' is used interchangeably with 'juror', although it is recognised that in some criminal proceedings the fact-finder will be a judicial officer.

3 Josh P Davis and Tim Valentine, 'CCTV on Trial: Matching Video Images with the Defendant in the Dock' (2009) 23 *Applied Cognitive Psychology* 482, 503.

4 Ruth Costigan, 'Identification from CCTV: The Risk of Injustice' (2007) *Criminal Law Review* 591; V Bruce et al, 'Verification of Face Identities from Images Captured on Video' (1999) 5(4) *Journal of Experiemental Psychology: Applied* 339.

regulation or judicial concern about the practice, despite indications that jurors find it problematic. It then draws upon observation research, visual culture scholarship, psychological research and case law to argue that the practice is, in fact, fraught with danger. Uninstructed and largely unaided, jurors may be influenced by a number of factors to arrive at an erroneous conclusion about identity. For this reason, this chapter concludes by suggesting how the jury's ability to accurately determine identity could be improved.

Image analysis, the fact-finder and the law

Under the *Evidence Act 1995* (NSW), a still or moving CCTV image is classified as a document.[5] As such, it will be admitted into evidence in a criminal prosecution if the following three conditions are satisfied: (i) its content (or what it shows) is relevant; (ii) it is adequately authenticated (that is, extrinsic evidence is given to establish that it is what it purports to be);[6] and (iii) it is not excluded by another provision of the Act. Invariably, CCTV images of an offender are relevant to the issue of the identity of the offender. Accordingly, provided evidence is given about their provenance (by, for example, the owner of the CCTV surveillance system or the police officer who collected the images from the system), the images will usually be admissible in evidence.[7]

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5 A still CCTV image is a 'photograph', while a recording of CCTV footage is 'a medium from which images of the offence can be reproduced with the aid of an appropriate play-back machine': *Evidence Act 1995* (NSW) Dictionary pt 1. See also *Wade v The Queen* [2014] VSCA 13, [24].

6 It has been judicially indicated that the authenticity of a document must be established by extrinsic evidence and cannot be achieved by drawing inferences from the face of the document alone: *Australian Securities and Investment Commission v Rich* [2005] NSWSC 417; *Aqua-Marine Marketing Pty Ltd v Pacific Reef Fisheries (Australia) Pty Ltd (No 4)* [2001] FCA 578; *NAB v Rusu* [1999] NSWSC 539. However, Stephen Odgers argues that 'it is not possible to see the source of these propositions in of law in the Act: Stephen Odgers, *Uniform Evidence Law* (Thomson Reuters, 10th ed, 2010), [1.3.360].

7 In some cases, however, they may be excluded pursuant to the provisions dealing with discretionary and mandatory exclusion in Part 3.11 of the Act if their probative value is outweighed by their prejudicial effect. This may be the case, for example, if the images are not of sufficient quality to compare with the accused and there is no other evidence about the identity of the person in the images. In addition, any conviction based on a comparison between the images and the accused may be quashed on the basis that it is unreasonable and not supported by the evidence for the purposes of s 6(1) of the *Criminal Appeal Act 1912* (NSW): *Slater v The Queen* [2015] NSWCCA 310.

Once in evidence, the CCTV images become exhibits in the proceedings. Generally, all exhibits are made available to the jury when it retires (unless they cannot physically be taken into the jury room).[8] However, the judicial officer retains the discretion to prevent an exhibit being sent to a jury room in some circumstances including, for example, if it poses a risk to the safety of the jury members. The jury members are then entitled to *use* the exhibit in certain ways during the course of their deliberations. As Gibbs CJ (Mason J agreeing) held in *Kozul v The Queen*

> the jury trying issues of fact are not restricted merely to looking at material objects (such as a revolver) that have been produced in evidence. They may if necessary touch and handle them, and they may, within limits that are readily understood in practice if difficult to define with precision, engage in a limited amount of simple experimentation with them.[9]

This experimentation, however, must not go beyond 'a mere examination and testing of the evidence' so as to become 'a means of supplying new evidence'.[10] However, it is often difficult to distinguish between permissible and impermissible experimentation with an exhibit. In *Kozul*, for example, the judges were divided on the issue of whether the jury should be permitted to test whether striking a blow to a hand holding a particular revolver could cause it to discharge.[11]

In the case of CCTV images, it is difficult to envisage how a fact-finder could experiment with the image so as to generate new evidence. However, the photograph requires 'an act of human intervention' in order to have meaning.[12]

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8 *R v Bradshaw* (1978) 18 SASR 83.

9 *Kozul v The Queen* [1981] HCA 19, [9].

10 Hodge v Williams (1947) 47 SR (NSW), 293 (Davidson J), cited in Ibid, [11].

11 Gibbs CJ (Mason J agreeing) thought this amounted to an improper gathering of additional evidence, while Stephen J (Murphy J agreeing) held it was appropriate for the jury to 'not only handle the revolver and experience the respective trigger pressures but to experience for themselves the sensation of a blow to the hand holding the revolver': Ibid, [19].

12 Katherine Biber, *Captive Images: Race, Crime, Photography* (Routledge-Cavendish, 2007), 14.

Accordingly, the fact-finder will be required to 'read' or interpret the image. This process is rarely straightforward in a prosecution in which identification is in issue. In many cases, it is difficult to ascertain who is depicted in the images, particularly when they are 'small, of low contrast or show faces from odd angles or in harsh lighting'.[13] In other cases, other evidence may impact on the way that the images are 'read' by the fact-finder, such as evidence that the accused and another person are remarkably similar, or identical, in appearance,[14] or that the accused was in another place at the time the images were recorded. For this reason, CCTV images of an offender fall into a category that Jennifer Mnookin calls 'semi-legible visual evidence', being 'neither entirely legible nor impossible to read'.[15] To interpret and glean information from evidence in this category 'requires the exertion of effort, expertise, or both'.[16]

In some cases involving CCTV images of an offender, the fact-finder will be presented with additional testimonial evidence relating to the issue of identity. This may be in the form of lay evidence (eyewitness identification evidence or recognition evidence) or expert evidence from a witness with a background in imagery analysis or a field of science relating to human appearance (such as anatomy or biological anthropometry).[17] However, in many cases, for a myriad of reasons, this evidence will be absent. For example, there will be no lay testimony relating to identification if there were no witnesses to the offence or if witnesses who may recognise the offender have not been located (or alternatively are unable or unwilling to assist the authorities). Further, while expert evidence about the identity of an offender in CCTV images is always theoretically available (upon

13 Zoë Henderson, Vicki Bruce and A Mike Burton, 'Matching the Faces of Robbers Captured on Video' (2001) 15 *Applied Cognitive Psychology* 445, 446.

14 In R v *Morrisey*, for example, the accused argued that the person depicted on CCTV images stealing goods from a store was her twin sister: *R v Morrisey* [2014] EWCA Crim 1518.

15 Jennifer L Mnookin, 'Semi-Legibility and Visual Evidence: An Initial Exploration' (2014) 10(1) *Law, Culture and the Humanities* 43, 47.

16 Ibid.

17 This evidence is often referred to as 'facial mapping' or 'body mapping' evidence in the case law and legal literature, depending on which features of the offender in the image are analysed by the witness.

the commissioning of a suitable expert witness), in practice its admissibility under s 79(1) of the Evidence Act 1995 (NSW) is controversial. [18]

Accordingly, in many cases, the fact-finder will be required to arrive at a conclusion about the identity of an offender captured on CCTV surveillance images unaided—that is, without the assistance of any other lay or expert evidence. This was the task required of the jurors in in *R v Gibson*, a criminal trial conducted at the Downing Centre District Court in July 2015 that was observed as part of the research for this thesis.

In this matter, the accused was charged with the offence of assault with intent to rob whilst armed with an offensive weapon. The charge arose from an attempted armed robbery of a service station in Lethbridge Park in October 2014, which was captured on CCTV surveillance cameras located in and around the service station. The moving images captured by the cameras were soundless, in colour and taken from three different elevated surveillance cameras. They depicted a man wearing a jersey with the number '34' on both its front and back approach the counter of the service station while holding a baseball bat. The man appeared to converse with the service station attendant, and left after a short period of time (during which several other customers had entered the point of service area of the service station building). The service station attendant testified that the man had demanded money from the cash register. After the prosecutor decided not to lead recognition evidence from the investigating police officers (on the basis that it was irrelevant pursuant to the judgment in *Smith v The Queen*), the images became the primary source of evidence about the identity of the offender

18 The debate about the admissibility of expert evidence of identification is discussed further in the Chapter 1. For a comprehensive discussion of concerns about facial and body mapping evidence, see Gary Edmond et al, 'Law's Looking Glass: Expert Identification Evidence Derived from Photographic and Video Images' (2009) 20(3) *Current Issues in Criminal Justice* 337. For a discussion about concerns about the reliability of other comparative forensic science evidence used in cases involving CCTV images, such as gait analysis, see: Gary Edmond and Emma Cunliffe, 'Gaitkeeping in Canada: Mis-steps in Assessing the Reliability of Expert Testimony' (2014) 92 *Canadian Bar Review* 327. It is important to note that debates about the reliability and use of these types of evidence are occurring in the context of a larger debate about deficiencies in forensic science systems: see National Research Council of the National Academy of Sciences, *Strengthening Forensic Science in the United States: A Path Forward* (National Academies Press, 2009).

(although this evidence was supported by evidence that a baseball bat and a jersey similar to those seen in the CCTV images were located in the accused's apartment a short time after the offence).

Neither the judicial officer nor the parties exhibited any disquiet about the fact that the jury members were required to analyse and compare CCTV images with the accused without the assistance of any other testimony on the issue of identification. The jury did not receive any directions or instructions from any participant in the proceedings as to the precise task that they were required to perform or the possible or optimum ways to approach it. That the jury had the skills and ability to arrive at a conclusion about identity in light of the evidence in the proceedings was assumed and unquestioned by all the participants in the proceedings.

Indeed, in Australia, the ability of the lay fact-finder to analyse and compare certain source and reference samples has always been assumed. In 1959, the High Court rejected the English approach that a jury 'should not be left unassisted to decide questions of disputed handwriting on their own'.[19] Without any analysis of the judicial statements that the practice was 'terribly risky',[20] the Court held that the English authorities were 'not now regarded as correct'[21] and courts began to permit juries to compare samples of handwriting without the assistance of a forensic handwriting expert.[22] In *Smith v The Queen*, again without any interrogation of the issue, the majority of the High Court implied that a jury could compare CCTV images of an offender with the accused without assistance when it held that

> [t]he fact that someone else has reached a conclusion about the identity of the accused and the person in the picture does not provide any logical basis for affecting the jury's assessment of the probability of the existence of that fact when the conclusion is based only on material

19 *R v Tilley* [1961] 3 ALL ER 406; *R v Rickard* (1918) 13 Cr App Rep 140; *R v Day* [1940] 1 ALL ER 402; *R v O'Sullivan* [2004] EWCA Crim 1832.
20 *R v O'Sullivan* [2004] EWCA Crim 1832.
21 *Adami v The Queen* [1959] HCA 70, [17].
22 See, eg, *R v Leroy* [2000] NSWCCA 302; *R v Doney* [2001] NSWCCA 463.

> that is not different in any substantial way from what is available to the jury'.[23]

Similarly, courts in Australia have permitted juries to compare audio recordings of a voice with the voices of those accused of crimes (even in circumstances when the recordings contain speech in two different languages)[24] and footprint impressions.[25]

The courts' easy acceptance of the practice of allowing the jury to compare images with the accused may be a result of the 'primacy of the visual' in evidence law, or the law's 'fixation with evidence that can be seen'.[26] First introduced in courtrooms in the United States in the 1850s, photographs have long played a significant role in legal proceedings,[27] as has videotape evidence (sometimes referred to as 'filmic evidence').[28] In light of their apparent ability to accurately reflect reality (by providing comprehensive, detailed, impartial and reliable evidence) photographic images are often viewed as 'evidentiary ambrosia', or the highest form of evidence.[29] Indeed, CCTV evidence occupies a particularly privileged position in the hierarchy of photographic evidence. The fact that it is not planned or staged [30] and is created in the absence of any human agency[31] makes it appear particularly credible. In addition, as a 'permanent eyewitness to

23 *Smith v The Queen* [2001] HCA 50, [11].

24 *Korgbara v The Queen* [2007] NSWCCA 84. For a further discussion of these cases, see Gary Edmond, Kristy Martire and Mehera San Roque, 'Unsound Law: Issues with ('Expert') Voice Comparison Evidence' (2011) 35(1) *Melbourne University Law Review* 52.

25 *R v Do (No 1)* [2015] NSWSC 106.

26 Jennifer L Mnookin and Nancy West, 'Theaters of Proof: Visual Evidence and the Law in *Call Northside 777*' (2001) 13 *Yale Journal of Law & the Humanities* 329, 386.

27 Jennifer L Mnookin, 'The Image of Truth: Photographic Evidence and the Power of Analogy' (1998) 10 *Yale Journal of Law and Humanities* 1, 9.

28 Jessica M Silbey, 'Judges as Film Critics: New Approaches to Filmic Evidence' (2004) 37(2) *University of Michigan Journal of Law Reform* 493, 496.

29 Jennifer L Mnookin, 'The Image of Truth: Photographic Evidence and the Power of Analogy' (1998) 10 *Yale Journal of Law and Humanities* 1, 19.

30 Jessica M Silbey, 'Judges as Film Critics: New Approaches to Filmic Evidence' (2004) 37(2) *University of Michigan Journal of Law Reform* 493, 21.

31 Glenn Porter and Michael Kennedy, 'Photographic Truth and Evidence' (2012) 44(2) *Australian Journal of Forensic Sciences* 183, 189.

crime and related troubles'[32] moving CCTV imagery often conveys more information than a photograph. By offering a linear narrative (as opposed to simply presenting a single snapshot of a moment in time), it provides far more contextual information than a 'spatially agnostic' photograph [33] and may even capture the entirety of the 'ground zero' moment, or the 'moment when the "trouble" occurred'.[34]

The ingrained belief that photographic images bear an indexical relationship to reality may provide an explanation for the judicial belief that comparing images with an accused in order to determine the identity of an offender is a 'perfectly straightforward' task[35] or a 'common place and every day event'.[36] This view is perhaps best expressed in *R v Dodson and Williams*, where the Court of Appeal in England held that jurors asked to compare CCTV images with an accused

> are called upon to do no more than the average person in domestic, social and other situations does from time to time, namely to say whether he is sure that a person shown in a photograph is the person he is then looking at or who he has seen recently. [37]

This approach can be contrasted to other areas of forensic comparison, such as bite mark analysis, tool mark analysis, footprint analysis and fingerprint analysis, which are considered too complex to be left to the jury to determine without the assistance of an expert. In *R v Amatto*, for example, the defence argued that a fingerprint examiner's evidence was not relevant as, pursuant to the judgment in *Smith v The Queen*, the jury could make its own comparison of the photograph of the fingerprint lifted from the crime scene and the impression of the accused's

32 Benjamin J Goold, Ian Loader and Angélica Thumala, 'The Banality of Security: The Curious Case of Surveillance Cameras' (2013) 53 *British Journal of Criminology* 977, 984.

33 Aaron Meskin and Jonathan Cohen, 'Photographs as Evidence' in Scott Walden (ed), *Photography and Philosophy: Essays on the Pencil of Nature* (Wiley-Blackwell, 2010) 70, 71.

34 Kim Lane Scheppele, 'The Ground-Zero Theory of Evidence' (1998) 49(2) *Hastings Law Journal* 321, 322.

35 *R v Shanmugarajah* [2015] EWCA Crim 783.

36 *R v Belnkinsop* [1995] 1 Cr App R 7.

37 *R v Dodson and Williams* (1984) 79 Cr App R 220, 228.

fingerprint. The court rejected this argument, noting that an analysis of fingerprints required knowledge of a number of technical matters, such as 'pattern type, ridge flow, friction ridge characteristics, and their relative position to each other, and the number of intervening ridges between these characteristics', and that permitting the jury to undertake a comparison unaided would be dangerous.[38]

The distinction in the case law between tasks that are within the skill set of the jury and tasks which it would be dangerous to permit the jury to undertake is in many ways logical and explicable. When the appearance or characteristics of the relevant crime scene sample are unfamiliar to the fact-finder (as with a fingerprint or bullet), or the methodology used to compare the samples involves the use of specialised equipment, a lengthy period of time or the application of specialised knowledge (as in a case involving DNA evidence), the jury will require the assistance of an expert. In these cases, the jury requires the expert's opinion as it forms 'a bridge between data in the form of primary evidence and a conclusion which cannot be reached without the application of expertise'.[39] Depending on the nature of the samples, the expert witness may perform either an educative role, by showing the fact-finder which features of the samples can and should be compared so as to allow the fact-finder to make an independent assessment of the evidence, or an explanatory role, by informing the fact-finder of the results and significance of the forensic comparison performed by the expert (and which cannot be replicated easily by the fact-finder).[40]

In matters where the fact-finder has experience and knowledge of the characteristics of the evidence derived from his or her everyday life experience, however, as is the case with matters involving handwriting, images or voices, courts have been content to permit the jury to undertake the comparison unaided. However, is the fact-finder's familiarity with the type of forensic evidence a sufficient basis for the assumption that he or she can analyse and compare

38 *R v Amatto* [2011] NSWDC 194, [6]–[8].
39 *Dasreef Pty Ltd v Hawchar* [2011] HCA 21, [90].
40 Jennifer Mnookin discusses 'deference' versus 'education' in expert evidence in Jennifer L Mnookin, 'Scripting Expertise: The History of Handwriting Identification Evidence and the Judicial Construction of Reliability' (2001) 87 *Virginia Law Review* 1723.

samples of it in order to form an opinion about identity? In many cases, it can be inferred from the nature of jury communications with the bench that fact-finders actually find the process difficult. In *Dodson*, for example, a member of the jury requested that a magnifying glass be sent into the jury room during the jury's deliberations (presumably to assist in the inspections of CCTV images of the robbery in question).[41] Many years later, in the first case to deal with unfamiliar face matching by the accused in Australia, the jury also requested a magnifying glass to view the relevant CCTV images.[42] In *Gibson*, observed for this thesis, the jury sent a note to the judge asking whether they would be permitted to view the CCTV images alone in the jury room and whether they could see the accused's hands and forearms on both arms (the trial judge had noted earlier in the proceedings, in the absence of the jury, that the accused had a tattoo on one arm that was visible in the CCTV footage and in an earlier arrest photograph that was to be tendered in evidence). Similarly, in *R v Leavesley*, a matter in which the only evidence against the appellant was CCTV images and photographs, the jury requested that the appellant stand up and turn around so that they could see him better.[43]

These types of questions from the jury to the presiding judicial officer in a number of proceedings indicate that for many fact-finders the task is not simple, commonplace or uncomplicated. On the contrary, it is clear that jury members find the task difficult enough to request tools to assist them with their task, more time and privacy within which to conduct their analysis, or further information upon which to base their conclusions. Further, if the task was simple and pedestrian in nature, it is unlikely that a jury would make an error when reaching its conclusion. However, in *Slater v The Queen*, the NSW Court of Criminal Appeal held that the jury's verdict, based solely on its conclusion that the appellant was one of the people depicted in CCTV images, was unreasonable and unsupported by the evidence. The footage in the case was 'stilted', 'blurry' and 'indistinct', and appeared to show the three robbers wearing 'matching pink/lilac outfits' (a matter the Court viewed as a strong indication that the colours were

41 *R v Dodson and Williams* (1984) 79 Cr App R 220.
42 Transcript of Proceedings, *Smith v The Queen* [2001] HCATrans 214 (25 May 2001).
43 *R v Leavesley* [1996] Crim LR 750.

distorted).[44] After undertaking its own comparison of the CCTV images and the appellant's arrest photographs, the Court held (and the Crown conceded), that the CCTV images showed facial features that were not consistent with those of the appellant (as depicted in his arrest photographs). Accordingly, the Court held that 'it was not open to the jury to be satisfied beyond reasonable doubt of the guilt of the Appellant'[45] and quashed the appellant's convictions, ordering verdicts of acquittal in their place.

The following section argues that there are several explanations for some jurors' struggle with the task of determining identity based on an analysis of CCTV images. First, while the fact-finder may have a high degree of visual literacy, he or she will have limited experience analysing forensic CCTV images or comparing these images for the purposes of determining identification. Second, the task required of the jury in even the most straightforward prosecution is more complex than is currently appreciated in the scholarship and the case law, extending far beyond a simple image-to-person matching task. Finally, psychological evidence indicates that people are generally very unskilled at recognising unfamiliar faces.

A 'commonplace' human experience?

There is an assumption that we are all familiar with viewing and interpreting moving pictorial images. Given the prominent role of visual media in society and the widespread use of video recording technology, ''[d]igital visuals have become a kind of vernacular which everyone can understand'.[46] However, although fact-finders living in highly visual modern cultures[47] may have a significant degree of visual literacy, it is unclear whether this automatically transposes into an ability to analyse, interpret or 'read' CCTV images adduced into evidence in a criminal

44 *Slater v The Queen* [2015] NSWCCA 310, [18]–[19].
45 Ibid, [23].
46 Neal Feigenson and Christina Spiesel, *Law on Display: The Digital Transformation of Legal Persuasion and Judgment* (New York University Press, 2009), 2.
47 See, eg, Bernard J Hibbitts, 'Making Sense of Metaphors: Visuality, Aurality, and the Reconfiguration of American Legal Discourse' (1994) 16(2) *Cardozo Law Review* 229.

prosecution. Forensic CCTV evidence is of an entirely different nature to that of conventional television or film (and to the CCTV images that are increasingly depicted in conventional television or film). In many cases, CCTV evidence is actually a compilation of images sourced from multiple CCTV cameras (which may or may not be located within the same surveillance systems). In these cases, the investigating officials will often view, cut and edit large amounts of surveillance footage so that the relevant images from multiple cameras are displayed in one continuous film (with events tending to be depicted in chronological order).

As such, CCTV evidence lacks the 'eloquent harnessing of image, sound, affect, memory, plot, episode, character, story and event' that characterises the genre of cinema or television drama.[48] It is often fragmented, of poor quality, and episodic in nature. The footage may abruptly jump from one perspective to another, and the images from the various cameras may vary markedly in both perspective and quality. Through the use of software, images of the same moment in time taken from different cameras may be displayed simultaneously on a 'split' screen so that they can compared and contrasted.

In addition to being visually anomalous, CCTV imagery adduced for a forensic purpose is generally silent. This is in direct contrast to other products of our visual culture, such as film, television programs and advertisements, which rely heavily on words to generate meaning. As Thompson notes

> the visual is not an isolated sensory dimension but is usually accompanied by the spoken or written word—it is the audio-visual or the textual-visual. Seeing is never 'pure vision', it is never a matter of simply opening one's eyes and grasping an object or event. On the contrary, seeing is always shaped by a broader set of cultural assumptions and frameworks, and by the spoken or written cues that

48 Alison Young, 'Arrested by the Image' (2012–2013) 57 *New York Law School Law Review* 77, 80.

> commonly accompany the visual image and shape the way in which the images are seen and understood.[49]

The ability of the fact-finder to view, comprehend and analyse forensic CCTV imagery may also be affected by the context in which it is viewed. The courtroom environment is foreign and characterised by ritual, rhetoric and symbolism. Imagery is formally tendered and then played, in silence, to the jury. While in some courtrooms in NSW jurors are provided with individual television monitors upon which to view videotape evidence, in many others the jurors are required to view the images on a large flat-screen monitor installed some distance from the jury box on the wall of the courtroom. Stripped of any control over the consumption of the imagery, the fact-finder has no ability to pause, stop or replay the images when they are adduced in evidence.

In addition to having limited or no experience with viewing forensic CCTV imagery, fact-finders typically do not have any experience with the comparative task they are required to undertake. Rarely do people compare images of unfamiliar people to determine if they match, or images of unfamiliar people with the appearance of a person in the flesh (unless of course they are required to undertake identity verification tasks during the course of their employment). The fact-finder's inexperience with these comparative tasks necessarily means that in the absence of assistance he or she will be required to 'divine' or intuit the appropriate methodology to utilise when undertaking the task. While many experts who engage in forensic facial comparison use the 'ACE-V' methodology (analysis, comparison, evaluation, and verification), the fact-finder will presumably conduct a simpler, less structured visual comparison of the relevant images.[50] Indeed, it is likely that the fact-finder will engage in either a simple

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49 John B Thompson, 'The New Visibility' (2005) 22(6) *Theory, Culture & Society* 31, 36.

50 As Jennifer Mnookin notes, ACE-V does not qualify as a 'scientific method' but is rather a 'cluster of practices, a point of view or an analytic framework': Jennifer L Mnookin, 'The Validity of Latent Fingerprint Identification: Confessions of a Fingerprinting Moderate' (2008) 7(2) *Law, Probability and Risk* 127, 132. Also, the National Academy of Sciences has noted that 'merely following the steps of ACE-V does not imply that one is proceeding in a scientific manner or producing reliable results': National Research Council of the National Academy of Sciences, *Strengthening Forensic Science in the United States: A Path Forward* (National Academies Press, 2009), 142–145.

holistic comparison of all of the features of the person depicted in the images, or a basic morphological analysis (that is, a comparison of the 'shape, appearance, presence and/or location of facial features').[51] However, the fact-finder may also adopt a methodology that has been assessed as unsound when it comes to image comparison, such as photo-anthropometry (the measurement of 'dimensions and angles of anthropologic landmarks and other facial features in order to quantify characteristics and proportions').[52]

Further to the conscious or subconscious decision on the methodology to be employed for the comparative task, the fact-finder will also be required to undertake at least three more tasks with which it is likely he or she will have little experience. First, the fact-finder must determine how the image qualities, such as lighting, angle, and lens properties, affect the appearance of the people depicted in the images to be assessed. Second, he or she will be required to determine the significance of any similarities or dissimilarities between the morphological characteristics being compared. Like the expert forensic analyst involved in pattern matching, he or she is required to determine whether the matching characteristics present in two or more samples are 'of such number and significance as to preclude the possibility or probability of their having occurred by mere coincidence'.[53] Third, he or she will be required to verbally analyse and discuss the characteristics of the offender and the accused during jury deliberations, a task that is difficult without knowledge of the relevant toolkit of terminology.

Hidden complexity

Typically, the scholarship and jurisprudence that surrounds unfamiliar facial matching by the jury focuses on the difficulties associated with comparing the

51 Facial Identification Scientific Working Group, *Guidelines for Facial Comparison Methods* (2012), 5.
52 Ibid, 7.
53 Harold Tuthill, *Individualization: Principles and Procedures in Criminalistics* (Lightning Powder Company, 1994), 59.

appearance of a person depicted in CCTV images with the accused in the dock.[54] Indeed, the leading High Court case on the admissibility of recognition evidence, *Smith v The Queen,*[55] involved a trial in which the jury was asked to compare a number of still black-and-white CCTV images of an offender with the accused in the courtroom.[56] However, in practice, the task of the fact-finder may be far more complex. Often, it involves the comparison of multiple images of people and physical items derived from a variety of sources. In *R v Gibson*, for example, the jury was invited to analyse and compare the following in order to arrive at a conclusion about identity:

- moving CCTV images of the offender taken from three different cameras (two located inside and one outside the service station);
- still photographs of the offender extracted from the moving footage taken inside and outside the service station;
- still photographs of the accused at the Mount Druitt Police Station after his arrest (extracted from CCTV footage taken by a CCTV surveillance system in the police station);
- numerous photographs of items of real evidence (clothing, a baseball bat and knives) seized from the accused's apartment at the time of his arrest;
- photographs of two of the three men who were present with the accused in his apartment at the time of his arrest;
- A photograph of the accused taken at an earlier point in time after he was arrested for an unrelated offence (which showed the accused wearing a jersey extremely similar in appearance to the one worn by the offender); and
- the appearance of the accused in the courtroom.

54 Ruth Costigan, 'Identification from CCTV: The Risk of Injustice' (2007) *Criminal Law Review* 591; Josh P Davis and Tim Valentine, 'CCTV on Trial: Matching Video Images with the Defendant in the Dock' (2009) 23 *Applied Cognitive Psychology* 482.

55 *Smith v The Queen* [2001] HCA 50.

56 Ibid.

The task required of the jurors in this matter was not unusual. Indeed, the proceedings in *R v Gibson* were relatively straightforward. The trial took place over a short period of time (approximately two and a half days) [57] and involved a single contested issue (the identity of the offender in the CCTV images). Further, the CCTV images were sourced from one surveillance system and the other images to which they were to be compared were high quality portrait style pictures. In contrast, as noted above, other prosecutions require jurors to compare images from multiple sources, including mobile telephone footage, webcams, social media and news footage.[58]

Psychological research

Burton et al note that in day-to-day life, we receive little feedback on our ability to recognise people with whom we have low familiarity. On the other hand, 'we can have many familiar face recognition events in a single day, and these are self-evidently successful'.[59] For this reason, it is possible that 'it is very difficult for people to believe that unfamiliar face recognition is poor—because they experience such fluent and accurate recognition of familiar faces'.[60] For over 20 years, however, psychological research has demonstrated that people are surprisingly poor when it comes to recognising unfamiliar faces.[61] Of particular relevance is research relating to our ability to undertake 'one-to-one matching tasks', or tasks in which one image is compared to another in order to determine

57 This period includes pre-trial legal argument about the admissibility of evidence which was conducted on a voir dire pursuant to s 189 of the *Evidence Act 1995* (NSW).

58 Forensic Science Regulator, *Forensic Image Comparison and Interpretation Evidence: Guidance for Prosecutors and Investigators (Issue 2)* (2015), [3.1].

59 Kay L Ritchie et al, 'Viewers Base Estimates of Face Matching Accuracy On Their Own Familiarity: Explaining the Photo-ID Paradox' (2015) 141 *Cognition* 161, 162.

60 Ibid, 169.

61 See, eg, V Bruce et al, 'Verification of Face Identities from Images Captured on Video' (1999) 5(4) *Journal of Experiemental Psychology: Applied* 339; A Mike Burton and Rob Jenkins, 'Unfamiliar Face Perception' in Andrew J Calder et al (eds), *The Oxford Handbook of Face Perception* (Oxford University Press, 2011) 287; Robert A Johnston and Andrew J Edmonds, 'Familiar and Unfamiliar Face Recognition: A Review' (2009) 17(5) *Memory* 577; Peter J B Hancock, 'Unfamiliar Face Recognition' in Caroline Wilkinson and Christopher Rynn (eds), *Craniofacial Identification* (Cambridge University Press, 2012) 11; Chang Hong Lii et al, 'Face Recognition is Robust With Incongruent Image Resolution: Relationship to Security Video Images' (2003) 9(1) *Journal of Experiemental Psychology: Applied* 33.

whether or not they show the same person. As noted above, the fact-finder will often be asked to compare or 'match' CCTV images of an offender with a photograph of the accused.[62] To date, this research has indicated that the process is error-prone.

In 2001, for example, Bruce et al's study found that people performed poorly when asked to match low-quality CCTV images and high-quality photographs of the same unfamiliar person.[63] More recently, Burton et al conducted an experiment involving 300 subjects, all of whom attempted to match images of a person taken minutes apart with different cameras. Despite the fact that the person was depicted in the same pose in both of the images, median performance was still only 92%. In other words, in ideal conditions—that is, when presented with high quality images of the same person, taken at the same point in time and in the same pose—half the sample made at least 8% errors.[64] The researchers noted that there is an error rate of between 10 and 25% in the face matching research, 'depending on the particular stimulus sets that have been used'.[65]

While the research on face matching provides an indication of the ability of members of the jury to compare and match photographs, in almost all cases involving CCTV evidence the fact-finder will also be required to compare a CCTV image of the offender to that of the accused as he or she appears in the courtroom. In other words, the fact-finder is required to compare a two-dimensional image with a live person, a task which may appear to be less problematic due to the increase in data available when viewing a person 'in the flesh'. However, research has established that this process is still difficult. For example, Kemp *et al* found that supermarket cashiers made a significant number

62 Note that the word 'match' and other like terminology may have a definition in a particular field of forensic science that does not correspond to the lay understanding of the term: see Dawn McQuiston-Surrett and Michael J Saks, 'Communicating Opinion Evidence in the Forensic Identification Sciences: Accuracy and Impact' (2008) 59 *Hastings Law Journal* 1159, 1161.

63 V Bruce et al, 'Matching Identities of Familiar and Unfamiliar Faces Caught on CCTV Images' (2001) 7(3) *Journal of Experiemental Psychology: Applied* 207. See also Zoë Henderson, Vicki Bruce and A Mike Burton, 'Matching the Faces of Robbers Captured on Video' (2001) 15 *Applied Cognitive Psychology* 445, 461.

64 A Mike Burton, David White and Allan McNeill, 'The Glasgow Face Matching Test' (2010) 42(1) *Behavior Research Methods* 286, 287.

65 Ibid, 286.

of errors when attempting to correctly match photographs on identification cards with shoppers (with nearly one third of decisions about identity being incorrect).[66] Davies and Valentine note however, that the photographs on the identity card were small, and would not contain as much identifying information as moving CCTV footage.[67] To test the ability of jurors to match CCTV images with an accused in the courtroom, Davis and Valentine showed subjects videos of 'offenders' and asked them to determine whether the offender was the same as a person who stood before them. The experiment revealed an overall error rate of around 20% (in both culprit-present and culprit-absent conditions), with the error rates varying among the different actors used in the experiment. The authors concluded that inviting a jury to 'compare a defendant with CCTV images as the only form of identification evidence would appear to be a risky policy, and on the basis of current research should be avoided, even if the footage is of the highest quality'.[68]

It is unclear why performance is so poor in unfamiliar face matching tasks. Researchers argue that a number of factors affect our ability to recognise unfamiliar faces. For example, it has been demonstrated that a change in viewpoint (for example, from a frontal to a three-quarter view) reduces the ability of people to accurately recognise unfamiliar faces,[69] as do changes in facial expression,[70] environmental context[71] and lighting.[72] When one or more of these

66 Richard Kemp, Nicola Towell and Graham Pike, 'When Seeing Should Not Be Believing: Photographs, Credit Cards and Fraud' (1997) 11(3) *Applied Cognitive Psychology* 211.

67 Josh P Davis and Tim Valentine, 'CCTV on Trial: Matching Video Images with the Defendant in the Dock' (2009) 23 *Applied Cognitive Psychology* 482, 485.

68 Ibid, 503.

69 Vicki Bruce, 'Changing Faces—Visual and Non-Visual Coding Processes in Face Recognition' (1982) 73(1) *British Journal of Psychology* 105. See also Harold Hill, Philippe G Schyns and Shigeru Akamatsu, 'Information and Viewpoint Dependence in Face Recognition' (1997) 62(2) *Cognition* 201.

70 Vicki Bruce, 'Changing Faces—Visual and Non-Visual Coding Processes in Face Recognition' (1982) 73(1) *British Journal of Psychology* 105.

71 See, eg, P Dalton, 'The Role of Stimulus Familiarity in Context-Dependent Recognition' (1993) 21 *Memory & Cognition* 223, cited in Robert A Johnston and Andrew J Edmonds, 'Familiar and Unfamiliar Face Recognition: A Review' (2009) 17(5) *Memory* 577, 582.

72 H Hill and V Bruce, 'Effects of Lighting on the Perception of Facial Surfaces' (1996) 22 *Journal of Experimental Psychology: Human Perception & Performance* 986, cited in Ibid, 585.

factors are combined, accurate performance declines even more.[73] Further, we appear to rely more heavily on external features when making recognition decisions about unfamiliar faces, and hence the covering of these features by, for example, a baseball cap, will affect the ability of a person to accurately recognise another unfamiliar face.[74] Unfamiliar faces are also recognised more easily if they are classified as 'distinctive',[75] and it is well established that 'own-race' faces are more easily recognised than 'other race' faces.[76]

While the existing literature sounds a strong cautionary note regarding the practice of allowing the jury to compare images with the accused in the courtroom, it is important to note it is not always directly applicable to the legal context. First, the experiments typically present images to the test subjects for a short period of time before testing their facial matching or recognition abilities (namely, a few seconds or minutes). In contrast, the fact-finder will often spend quite a large period of time in the accused's presence during the course of the trial and may observe the accused sitting in different positions in the courtroom (for example, in the dock and the witness box), as well as talking and gesturing (when testifying) and walking (while moving to the witness box, or attending an out-of-court view). Given the lack of certainty about the process by which unfamiliar faces become familiar, it is possible that this greater exposure to the accused in the courtroom environment may be sufficient to ameliorate many of the problems identified in the psychological literature.

Furthermore, the subjects engaged in the psychological experiments attempt to match or recognise faces in circumstances that are vastly different to those

73 Ibid, 582.

74 Won-Joon Lee et al, 'Matching Unfamiliar Faces from Poor Quality Closed-Circuit Television (CCTV) Footage: An Evaluation of the Effect of Training on Facial Identification Ability' (2009) 1(1) *AXIS* 19, 25; Zoë Henderson, Vicki Bruce and A Mike Burton, 'Matching the Faces of Robbers Captured on Video' (2001) 15 *Applied Cognitive Psychology* 445.

75 Robert A Johnston and Andrew J Edmonds, 'Familiar and Unfamiliar Face Recognition: A Review' (2009) 17(5) *Memory* 577, 587.

76 See, eg, Christian A Meissner and John C Brigham, 'Thirty Years of Investigating the Own-Race Bias in Memory for Faces: A Meta-Analytic Review' (2001) 7(1) *Psychology, Public Policy, and Law* 3.

encountered by the fact-finder in a criminal prosecution in a higher court.[77] For example, the subjects of psychological experiments do not typically have the opportunity to:

- analyse multiple sets of images of an offender and the accused;
- confer with others about their conclusions about the imagery;
- reflect on their initial impressions over a number of days;
- make decisions about identity after reviewing other evidence that may be indicative of guilt or innocence;
- make decisions about identity after listening to advocates submissions about what facts can be found on the basis of the evidence.

Further, they are not required to make decisions to the legal standard of 'beyond reasonable doubt', are not required to agree with the set number of other people about their conclusion, are not bound by an oath to impartially assess the image, and are not burdened by the knowledge that their decision may have serious ramifications for the parties involved.

This section has analysed the three main reasons why the fact-finder may find the task of image analysis to confirm identity difficult in practice—namely, it is likely to be outside his or her experience; it is surprisingly complex; and people are poor at recognising unfamiliar faces. Below, it is argued that, in addition to being difficult, the process of permitting the jury to compare images with the accused to determine the issue of identity unaided may be attended by error which could have serious implications for the administration of justice.

The role of the modern fact-finder

The role of the fact-finder has evolved since the establishment of trial by jury in the early thirteenth century.[78] As Bathurst CJ has noted, the earliest jurors 'had

77 The research may be more applicable to the task faced by a magistrate in a local court proceeding.

78 Sir Frederick Pollock and Frederic William Maitland, *The History of English Law: Before the Time of Edward I* (The University Press, 2nd ed, 1895), vol 2, 601.

almost the character of the witness in a modern trial'.[79] That is, like a witness, the early juror often had direct personal knowledge of the facts or issues in dispute.[80] Over time, however, as more and more witnesses were called to give evidence in legal proceedings, the modern distinction between the fact-finder and the witness crystallised.[81] Today, unlike a witness, a fact-finder is expected to be independent and impartial. He or she should know little, if anything, about the charges faced by the accused prior to the commencement of the trial, and is required to absorb, evaluate and weigh the evidence adduced in the proceedings in order to arrive at a verdict of guilty or not guilty.[82] In contrast with the role of early jurors, the modern juror is not permitted to make any inquiries about evidential matters outside of the courtroom. The rules of evidence have morphed into 'the sieve through which information must pass before a jury is required or entitled to consider it'[83] and to consider extrinsic material not adduced by one of the parties in the proceedings may result in a miscarriage of justice.[84]

It appears, however, that the influx of CCTV imagery in legal proceedings may be subtly altering the role of the modern fact-finder. When comparing CCTV images with known exemplars in order to determine identity, the fact-finder is not being required to simply 'estimate the value of the testimony before them'[85] or to assess the appearance, condition and quality of an item of real evidence. Rather, he or she is being required to perform an investigative task, to engage in a 'comparative

79 Chief Justice of New South Wales The Hon T F Bathurst, 'Courting Ceorls and Eorls' (Speech delivered at the 20th Anniversary of the Evidence Act, Sydney, 13 June 2015).

80 John Marshall Mitnick, 'From Neighbor-Witness to Judge of Proofs: The Transformation of the English Civil Juror' (1988) 32 *America Journal of Legal History* 201, 204. The use of personal knowledge by jurors began to fall into disfavour in the mid-seventeenth century and was finally prohibited in the mid-eighteenth century: see Ibid.

81 Chief Justice of New South Wales The Hon T F Bathurst, 'Courting Ceorls and Eorls' (Speech delivered at the 20th Anniversary of the Evidence Act, Sydney, 13 June 2015); Ellen E Sward, 'A History of the Civil Trial in the United States' (2002) 51 *University of Kansas Law Review* 347, 354.

82 New Zealand Law Commission, *Juries in Criminal Trials: Part One*, Preliminary Paper No 32 (1998), [62]. The jury may also be said to be the conscience of the community, a protection against oppressive government, and an institution that educates the public about the law and ensures the legitimacy of the criminal justice system: Ibid, [57].

83 *R v Skaf* [2004] NSWCCA 37, [277].

84 Ibid.

85 *Kozul v The Queen* [1981] HCA 19, [22].

examination involving visual recognition'.[86] In some ways, this task is similar to that performed by the eyewitness to an offence who later identifies a person as the offender. However, it could also be compared to that performed by the forensic scientist who compares a sample from a crime scene to a sample linked to the accused in order to determine whether they match. [87]

The following section explores the previously unexamined question of the consequences of abruptly ejecting the fact-finder from his or her passive, neutral role and requiring him or her to generate or formulate evidence. It argues that a number of the factors which may affect the reliability of eyewitness evidence and forensic science evidence may also affect the quality of the fact-finder's analysis of CCTV images for the purposes of determining the identity of the offender. Consequently, there needs to be greater awareness among the legal profession about the complexities and dangers of the comparative task being performed by modern jurors.

The fact-finder as eyewitness

As Richard Sherwin observes, when viewing CCTV images in legal proceedings, fact-finders 'are thrust into the role of putative eyewitness to electronically mediated events'.[88] No longer 'magisterially blind' and 'cloistered away from the contested events that they adjudicate',[89] jurors are now able to observe an increasingly diverse range of criminal activity. The effect of this 'evidentiary revolution'[90] on the fact-finding process is unknown. However, it has been noted that 'witnessing' is a unique mode of perception, and that '[t]o witness an event is

86 Itiel E Dror et al, 'Cognitive Issues in Fingerprint Analysis: Inter- and Intra-Expert Consistency and the Effect of a "Target" Comparison' (2011) 208 *Forensic Science International* 10, 10.

87 Paul C Giannelli, Edward J Imwinkelried and Joseph L Peterson, 'Reference Guide on Forensic Identification Expertise' in Federal Judicial Centre and National Reseach Council of the National Academies (eds), *Reference Manual on Scientific Evidence* (3rd ed, 2011), 71.

88 Richard K Sherwin, *Visualizing Law in the Age of the Digital Baroque: Arabesques and Entanglements* (Routledge, 2011), 6.

89 Mary D Fan, 'Justice Visualized: Courts and the Body Camera Revolution' (Legal Studies Research Paper No 2016–11 University of Washington School of Law, 2016), 1.

90 Ibid, 1.

to be responsible in some way to it'.[91] Indeed, in each of the cases that I observed as research for this thesis, the act of watching the CCTV images fundamentally transformed the tenor of the proceedings for me, imbuing the prosecution's allegations with sense of immediacy and reality that was not initially present when accused was arraigned or other testimonial evidence was led.

In one matter in particular, the nature of the CCTV imagery was such that the sense of 'witnessing' the event on viewing the CCTV imagery was particularly strong. In *R v Perks,* the accused had been charged with a number of driving offences after his truck crashed into the back of a line of stationary cars on the M7 motorway in Sydney. The crash was recorded by a 'GoPro' or 'truck cam' which was mounted on the dashboard of the cabin of the vehicle. Positioned in the centre of the windscreen, the camera recorded a clear, unimpeded view of the hood of the truck and the road before it. In the proceedings, the 52-second piece of footage was played once from start to finish after the Officer in Charge had finished giving his evidence in chief. Displayed on a large television screen opposite the jury box, the footage showed the hood of the truck travelling rapidly along the motorway, rounding a slight bend and then, without slowing, crashing into the right back side of a white Hi Ace minivan (containing school children). When watching the clear, colour footage, I had the distinct sense that I was witnessing real events from the point of view of the accused. The low roar of the truck's engine, the indecipherable buzz of the radio playing in the background, the bright scenery rolling past, the image of the stationary cars growing larger on the screen, the sound of the impact between the vehicles, the glimpse of debris flying past the windscreen before the screen went black, were all small details that would not have been elicited during oral testimony of any witness to the offence, but which, when taken cumulatively, allowed me to *experience* the offence as opposed to hear about how it happened. Interestingly, this was the only case I observed in which the CCTV imagery contained sound, a fact that Feigenson and Spiesel note 'make the events depicted on the tape seem especially present and real'.[92]

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91 John Durham Peters, 'Witnessing' in P Frosh and A Pinchevski (eds), *Media Witnessing: Testimony in the Age of Mass Communication* (Palgrave Macmillan, 2009) 23, 24.

92 Neal Feigenson and Christina Spiesel, *Law on Display: The Digital Transformation of Legal Persuasion and Judgment* (New York University Press, 2009), 45.

If viewing CCTV images can place the fact-finder in the same position as an eyewitness, then requiring the fact-finder to attempt to identify the accused in the courtroom could be likened to a 'dock identification' by a witness during the proceedings.[93] In many jurisdictions, including New South Wales, dock identifications, once widely used, are now discouraged by the courts and rarely elicited from witnesses in practice.[94] Of all of the different types of identification evidence, dock identifications are seen to present 'danger in an acute form'.[95] The primary concern is that at the trial, 'circumstances conspire to compel the witness to identify the accused in the dock'.[96] Of these circumstances, the fact that the witness is presented with only one possible suspect is of the most concern.[97] If the witness' memory of the offence is poor, or has faded with the passage of time, the assumption that the correct person has been arrested, charged and prosecuted for the offence may lead the witness to assume that the accused is the person who committed the offence (particularly if there is some resemblance between the two).[98] Moreover, the witness' awareness that a failure to nominate the accused as the offender in court will have serious consequences for the prosecution may place the witness under 'a degree of psychological pressure that many may find difficult to shrug off'.[99]

Although broadly analogous, the jury's task in a case involving CCTV images of an offender is not identical to that of an eyewitness asked to make a dock

93 D W Elliott, 'Videotape Evidence: The Risk of Over-Persuasion' (1998) *Criminal Law Review* 159, 163; *R v O'Neill* [2001] VSCA 227, [87].

94 In Australia, for example, the High Court has been critical of the probative value of dock identifications: see *Alexander v The Queen* [1981] HCA 17; *Festa v The Queen* [2001] HCA 72. The rarity of dock identifications in practice is noted in Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Uniform Evidence Law*, Report No 102 (2005), ch 13. Dock identifications are also discouraged in New Zealand and, although not prima facie inadmissible, are rare in England, Wales and Northern Ireland: *Harney v New Zealand Police* [2011] NZSC 107; *Tido v The Queen* [2011] UKPC 16. They are permitted in Scotland, although identification evidence also requires corroboration in this jurisdiction: see *Holland v HMA* [2005] UKPC D1; Tim Valentine, 'Forensic Facial Identification' in Anthony Heaton-Armstrong et al (eds)(Oxford University Press, 2006) 281, [17.48].

95 *Aslett v The Queen* [2009] NSWCCA 188.

96 *Alexander v The Queen* [1981] HCA 17, [20] (Mason J).

97 *Aslett v The Queen* [2009] NSWCCA 188 [75].

98 *Alexander v The Queen* [1981] HCA 17; *Davies v The King* [1937] HCA 27; Australian Law Reform Commission, *Evidence*, Interim Report No 26 (1985).

99 *Strauss v Police* [2013] SASC 3, [186].

identification. [100] As one legal scholar has noted, a dock identification requires an eyewitness to compare the appearance of the offender, stored in his or her memory, with the appearance of the person in the dock, and to come to a conclusion as to whether they are the same person. In contrast, the task faced by the fact-finder when analysing or interpreting CCTV imagery is essentially perceptual. It involves no 'memory load', but instead requires the fact-finder to simultaneously compare the image of an offender with the accused in the dock.[101] Accordingly, concerns about dock identifications that stem from the inability of the witness to accurately recall and rely upon his or her memory are not applicable to the task faced by the jury.

However, the law's aversion to dock identifications is based on more than a concern about the fallibility of the human memory. It is also founded on a concern about *suggestibility*—a fear that that the witness will conclude that the offender was the accused simply because he or she has been arrested and prosecuted for the offence—as well as a concern about the *psychological pressure to identify the accused*. The following section argues that both of these factors may also be present when the jury is asked to compare an image of an offender with the accused in the dock, thereby highlighting the potentially problematic nature of this increasingly commonplace courtroom activity.

Implicit and explicit suggestion

As discussed in Chapter 3, the absence of recognition evidence in a matter involving CCTV images of an offender may leave a substantial 'gap' in the prosecution's narrative. In these cases, if the CCTV images are the only evidence relied upon to support the allegation that the accused committed the offence, there is an underlying awareness among everyone involved in the proceedings that, at some point in the past, the police decided that the person depicted in the images was most likely the accused. However, as the basis for this conclusion is not

100 Andy Roberts, 'Identification of Suspects from CCTV and Video Recordings: Attorney-General's Reference (No. 2 of 2002) [2002] EWCA Crim 2373' (2003) 67 *Journal of Criminal Law* 91.

101 Ibid.

revealed to the fact-finder, it can only be a matter of speculation. Perhaps the investigating police officers recognised the accused from the CCTV images. Or perhaps there was other evidence indicative of the accused's guilt, such as a confession or DNA evidence, which for some reason is not being presented to the fact-finder. It is this absence of information about how the accused was selected out of the wide pool of potential suspects that gives rise to the implicit, untested suggestion that the offender and the accused are the same person.

Of greater concern to the rectitude of the fact-finding process, however, is the explicit suggestion that the offender and the accused are the same person. In a number of respects, an adversarial criminal trial represents a 'regulated storytelling contest'.[102] The prosecution presents the fact-finder with evidence and arguments to support its case theory[103] and the defence will often choose to do the same. In many instances, therefore, the fact-finder is presented with 'two mutually inconsistent interpretations of common data.'[104] In a case involving CCTV images of an offender, each party must attempt to ensure that what the fact-finder sees in the images is consistent with his or her case theory. The importance of this task cannot be overstated. As Sherwin has observed, '[t]he battle inside the courtroom over competing storylines plays out even more powerfully on the screen than it does in print".[105]

However, it is important to recognise that the advocate's ability to submit on what can be seen in the images may 'prime' the fact-finder to see certain matters in the images, thereby heightening the risk of misinterpretation of the evidence. While a prosecutor's opening address should not contain material in the form of arguments and submissions,[106] it is possible that it could contain, at a minimum, a statement

102 Gary Goodpaster, 'On the Theory of American Adversary Criminal Trial' (1987) 78(1) *Journal of Criminal Law and Criminology* 118, 120.

103 A case theory is a 'simple, plausible, coherent, legally sufficient narrative that can easily be integrated with a moral theme': R Burns, *A Theory of the Trial* (Princeton University Press, 1999), cited in Neal Feigenson and Meghan A Dunn, 'New Visual Technologies in Court: Directions for Research' (2003) 27(1) *Law and Human Behavior* 109, 112.

104 Gary Goodpaster, 'On the Theory of American Adversary Criminal Trial' (1987) 78(1) *Journal of Criminal Law and Criminology* 118, 120.

105 Richard K Sherwin, 'Visual Jurisprudence' (2012) 57(1) *New York Law School Law Review* 11, 13.

106 *R v MM* [2004] NSWCCA 81.

that CCTV images of an offender who was of similar appearance to the accused will be tendered during the course of the trial (if the images have not been already been tendered prior to the commencement of the opening address).[107] Similarly, although more constrained in its potential content, an opening statement by the defence may also seek to 'read' or interpret the CCTV evidence (it is unlikely, however, that a defence advocate will also be permitted to tender evidence prior to his or her opening, given the limited purpose of the accused's opening address).[108]

There is little academic or judicial discussion about the appropriate limits to be observed by advocates in submissions on the content of CCTV images in an opening address. In the New Zealand case of *Mafi v The Queen*,[109] the prosecutor played and commented on CCTV footage of a physical altercation between a number of men during his opening address. On appeal, the appellant argued that the approach was unfair, and that the prosecutor 'pre-emptively set the tone for the trial by inappropriately drawing the jury's attention to what would become vital evidence at trial'. The Court of Appeal of New Zealand rejected this argument, unanimously holding that

> [a] prosecutor is always entitled in an opening address to refer to evidence to be given at trial. Whether and to what extent he or she does so is a matter of judgment. Here, there was no challenge to the admissibility of the CCTV footage which was the primary evidence for the Crown. It was simply a matter of timing; the jury was always going to be invited to consider the footage and still images in detail and with care because both were sufficiently clear to identify most of the actions taken by those responsible for the attack. Reference to the footage in opening before its formal admission could not possibly usurp the jury's function.[110]

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107 In *R v Rogerson and McNamara,* a case observed as part of the research for this thesis, the prosecutor tendered a book of CCTV images prior to commencing his opening address and referred to them extensively as he outlined the Crown case.

108 That is, to outline the areas of contention and any matters to be raised by the accused during the course of the proceedings: *Criminal Procedure Act 1986* (NSW), s 158; *R v MM* [2004] NSWCCA 81.

109 *Mafi v The Queen* [2015] NZCA 408.

110 Ibid, [15].

While the concept of 'priming' has not been raised in the context of the interpretation of CCTV images by advocates, it has been discussed in case law involving recorded conversations and voice identification evidence. In *Bain v The Queen*, for example, the Supreme Court of New Zealand considered the admissibility of part of a recorded conversation between the appellant and an emergency services telephone operator. The prosecution contended that it was possible to hear the words 'I shot the/that prick' in the recording. However, none of the four expert forensic linguists called by the parties could testify with any certainty what (if any) words were spoken in the relevant part of the recording, and several cautioned against 'priming' the jury to hear the words by suggesting that they could be hear. In earlier proceedings, the Court of Appeal had noted that it was only with prior knowledge of the possible interpretation of the passage that

> the disputed sounds can undoubtedly be heard as an inculpatory sentence. But what is very interesting is that, with the exception of Detective Ward (and/or the staff at Strawberry Sound), no one who has listened to the tape "unprimed" would appear to have heard and construed the disputed sounds in this way.[111]

Although the Court of Appeal held that the evidence was admissible, it suggested a procedural reform to help to ameliorate the potential prejudice of the priming—namely, that that the jury first hear the recording without any evidence about its content in order to counter the obvious risk caused by the power of suggestion.[112]

While opening addresses provide advocates with a limited opportunity to address the jury about the content of CCTV images, closing addresses provide a more logical and appropriate point in time to make submissions about the evidence that has been adduced in the course of the prosecution—that is, to *persuade* the fact-finder to adopt a particular interpretation of the evidence. It is well-accepted that a prosecutor's submissions to the jury in his or her closing address must be based on

111 *Bain v The Queen* [2009] NZSC 16, [30].

112 This procedure was not ultimately followed, however, as the Supreme Court of New Zealand held that the evidence (the disputed portion of the tape) was inadmissible on the basis that its probative value was outweighed by its prejudicial effect: Ibid, [67].

the evidence adduced in the proceedings[113] and should not convey the prosecutor's personal opinions.[114] However, these rules of practice do not appear to overly constrain the nature of the submissions that can be made about what can be seen in the CCTV images. In *R v Gibson*, discussed above, the prosecutor was relatively restrained in his closing address. He made no submissions about any of the features of the offender in the CCTV images, and did not compare these features to those of the accused. He did say, however, quite forcefully, that it was 'as clear as day' that the person in the footage was the accused. Nevertheless, as Counsel for the respondent noted in argument before the High Court in *Honeysett,* after the tender of CCTV evidence, it is open for a prosecutor to submit about any perceived similarities between the anatomical features seen in the various images. The prosecutor may 'simply outline as many features as they can possibly legitimately submit they can see on the video and then say, well, there are eight features; there are 10 features that are similar; there are features that are similar'.[115]

The problem with this approach is that the prosecutor may give his or her opinion an unwarranted 'veneer of legitimacy'.[116] As noted above, the psychological evidence indicates that we are not particularly adept at recognising or matching unfamiliar faces in images, or comparing unfamiliar faces in images to a person 'in the flesh'. However, in NSW, when a jury is required to determine the issue of identity without the assistance of other testimonial evidence, he or she may be persuaded by the submissions of the prosecutor about what conclusions can be drawn from a comparison of images with the accused, despite the fact that the prosecutor will not generally have any particular expertise in image-based comparisons of facial features, nor any detailed knowledge of anatomy, the methods of image comparison, photography or 'image science'.

113 *Ibrahim v The Queen* [2014] NSWCCA 160, [80]; *Legal Profession Uniform Conduct (Barristers) Rules 2015* (NSW), rule 64.

114 *R v Livermore* [2006] NSWCCA 334; *Basic v The Queen* [2015] VSCA 109, [72].

115 Transcript of Proceedings, *Honeysett v The Queen* [2014] HCATrans 121 (12 June 2014). The High Court accepted that it was open to the prosecutor to make submissions about the characteristics of the accused and the offender 'without the necessity of evidence': See *Honeysett v The Queen* [2014] HCA 29, [44].

116 *Basic v The Queen* [2015] VSCA 109, [62].

Further, it is possible that pre-existing, culturally derived expectations about surveillance film and its role in criminal proceedings could make the fact-finder exhibit a high degree of deference to the prosecutor's opinion about what can be seen in the images. As Biber notes, '[w]hen we look at surveillance images, we already know what we are looking for. We have already seen it, repeatedly, in newspapers, on television, in our victim's-eye view of the world. It is familiar to use because it is *genre* and we are its audience'.[117] In particular, CCTV evidence is regularly used to solve crimes in fictional television crime dramas, which many scholars argue operate to shape public opinion about crime and the criminal justice system.[118] In these dramas, 'villains are regularly laid by the heels of ubiquitous and all-seeing security cameras'.[119] As Elliot argues, familiarity with this type of visual entertainment may result in a jury who are 'more than ready to be persuaded' by the evidence.[120]

Psychological pressure to identify accused

Together with suggestion, a fact-finder may encounter psychological pressure or impetus to identify the accused from CCTV imagery. In some cases, CCTV imagery that is relevant to the identity of an offender may also show the offence in question being committed. On occasions, the images will amount to 'gruesome' evidence—that is, evidence that is not simply offensive or embarrassing but is of 'an exceptionally graphic and grisly quality'.[121]

117 Katherine Biber, *Captive Images: Race, Crime, Photography* (Routledge-Cavendish, 2007), 20.

118 Aaron Doyle, *Arresting Images: Crime and Policing in Front of the Cameras* (University of Toronto Press, 2003), cited in Tom R Tyler, 'Viewing CSI and the Threshold of Guilt: Managing Truth and Justice in Reality and Fiction' (2006) 115 *Yale Law Journal* 1050, 1063.

119 D W Elliott, 'Videotape Evidence: The Risk of Over-Persuasion' (1998) *Criminal Law Review* 159, 159.

120 Ibid.

121 David A Bright and Jane Goodman-Delahunty, 'Mock Juror Decision Making in a Civil Negligence Trial: The Impact of Gruesome Evidence, Injury Severity, and Information Processing Route' (2011) 18(3) *Psychiatry, Psychology and Law* 439, 439.

Even given 'individual differences in susceptibility to emotional information' among jurors,[122] the emotional force of gruesome CCTV evidence is beyond dispute. The images, when released for public consumption, are often accompanied by a warning label advising the viewer that they contain 'graphic content'. In media reports of cases involving such evidence, it is common for journalists to note that members of the jury gasped when the images are played in the courtroom,[123] or that members of the victim's family audibly wept.[124] Even judicial officers, who might be expected to be inured to evidence of a distressing nature, describe CCTV imagery of this nature as 'chilling',[125] deeply distressing,[126] 'sickening to watch'[127] or representing 'exceedingly unpleasant viewing'.[128]

The impact of gruesome CCTV images on jurors is largely unexplored.[129] Nevertheless, existing psychological and neuroscientific research indicates that gruesome visual evidence in general may have an undesirable effect on the criminal fact-finding process. In 1991, for example, psychologists Saul Kassin and David Garfield demonstrated that mock jurors who viewed a colour 'blood and guts' videotape of a murder victim applied lower standards of proof for

122 Jessica Salerno and Bette L Bottoms, 'Unintended Consequences of Toying with Jurors' Emotions: The Impact of Disturbing Emotional Evidence on Jurors' Verdicts' (2010) 22(2) *Jury Expert* 16, 22.

123 See, eg, Richard Vernalls, 'Kerry Dixon Jailed: Former England Striker's "Sickening" Pub Attack Draws Gasp When CCTV Shown in Court', *Mirror* (online), 19 June 2015 <http://www.mirror.co.uk/sport/football/news/kerry-dixon-jailed-former-england-5913488>.

124 See, eg, Ben Endley, 'Family Weep as CCTV Footage of Billy Dove Stabbing Played to Court', *Watford Observer* (online), 30 June 2012 <http://www.watfordobserver.co.uk/news/9791125.Family_weep_as_CCTV_footage_of_Billy_Dove_stabbing_played_to_court/>.

125 Andrea Petrie, 'Ex-Soldier Jailed 23 Years for Murder', *The Age* (online), 11 August 2012 <http://www.theage.com.au/victoria/exsoldier-jailed-23-years-for-murder-20120810-2401i.html>.

126 Paula Doneman, 'Teen's Attack on Disabled Pensioner "Spine Chilling and Despicable"', *7News* (online), 4 May 2015 <https://au.news.yahoo.com/a/27583215/teens-attack-on-disabled-pensioner-spine-chilling-and-despicable/#page1>.

127 Richard Vernalls, 'Kerry Dixon Jailed: Former England Striker's "Sickening" Pub Attack Draws Gasp When CCTV Shown in Court', *Mirror* (online), 19 June 2015 <http://www.mirror.co.uk/sport/football/news/kerry-dixon-jailed-former-england-5913488>.

128 *Director of Public Prosecutions v Skipwith* [2016] VCC 76, [6].

129 Jessica Salerno and Bette L Bottoms, 'Unintended Consequences of Toying with Jurors' Emotions: The Impact of Disturbing Emotional Evidence on Jurors' Verdicts' (2010) 22(2) *Jury Expert* 16, 22.

conviction than those who did not.[130] Further, in 2006, David Bright and Jane Goodman-Delahunty showed that mock jurors who viewed gruesome photographs of a murder victim were more likely to find the defendant guilty of the offence than those who did not see the images.[131] It is unclear why these images affected the mock jurors in the manner that they did. Perhaps they inspired feelings of anger in the viewer, which has been shown to result in 'shallower' information processing.[132] In particular, the emotion of anger has been shown to cause people to rely on heuristics, or 'cognitive shortcuts' (such as stereotypes) to process information and to interpret evidence in a way that supports the blaming of a target of the anger.[133] Alternatively, the emotional effect of the footage may create a psychological need in the fact-finder to see a person identified and punished for the offence; to achieve 'completeness and closure'.[134]

Research also indicates that gruesome or disturbing images may affect the jury's conclusions about whether or not samples in a comparative task 'match'. In 2005, a group of researchers demonstrated that decisions made by students about whether sets of ambiguous fingerprints matched could be affected by the emotional context in which they were made. Students who were informed that the fingerprints they were examining had been lifted from a weapon used in a vicious, unprovoked attack, and who were shown disturbing crime scene photographs to support this claim, were more likely to conclude that pairs of prints matched than students who were not provided with this same background information.[135]

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130 Saul M Kassin and David A Garfield, 'Blood and Guts: General and Trial-Specific Effects of Videotaped Crime Scenes on Mock Jurors' (1991) 21(18) *Journal of Applied Social Psychology* 1459.

131 David A Bright and Jane Goodman-Delahunty, 'Gruesome Evidence and Emotion: Anger, Blame and Jury Decision-Making' (2006) 30 *Law and Human Behavior* 183.

132 See, eg, Jessica Salerno and Bette L Bottoms, 'Unintended Consequences of Toying with Jurors' Emotions: The Impact of Disturbing Emotional Evidence on Jurors' Verdicts' (2010) 22(2) *Jury Expert* 16, 19; Susan A Bandes and Jessica M Salerno, 'Emotion, Proof and Prejudice: The Cognitive Science of Gruesome Photos and Victim Impact Statements' (2014) 46 *Arizona State Law Journal* 1003, 1008.

133 See, eg, Jessica Salerno and Bette L Bottoms, 'Unintended Consequences of Toying with Jurors' Emotions: The Impact of Disturbing Emotional Evidence on Jurors' Verdicts' (2010) 22(2) *Jury Expert* 16, 19.

134 Tom R Tyler, 'Viewing CSI and the Threshold of Guilt: Managing Truth and Justice in Reality and Fiction' (2006) 115 *Yale Law Journal* 1050, 1064.

135 Itiel E Dror et al, 'When Emotions Get the Better of Us: The Effect of Contextual Top-Down Processing on Matching Fingerprints' (2005) 19(6) *Applied Cognitive Psychology* 799.

Again, however, it is important to note the limits of experimental research in this context. As Feigenson points out, in a real trial scenario 'the impact of emotional evidence is often blunted by the much larger amount of relatively boring testimony that precedes and follows it, and decision making typically follows the emotion-provoking evidence by days or weeks, not minutes or hours as in the psychology lab'.[136] Further, the existing research into the effect of emotion in criminal proceedings is lacking in depth and nuance.[137] Accordingly, while it is possible to speculate that gruesome CCTV images can influence the way that jurors interpret, analyse and weigh evidence in a criminal proceeding, more research is needed before any firm conclusions can be drawn in this area.

The fact-finder as forensic scientist

The comparison of a CCTV image of an offender with an accused is similar to other forensic identification techniques, such as 'the analysis of latent prints, tool marks, bite marks, handwriting and shoe print identification'.[138] Like these other fields of inquiry, the purpose of the task is to determine 'source attribution', [139] or to infer whether there is a common source between a piece of evidence located at the crime scene (the CCTV image) and a reference sample (another photograph of the accused, or the accused him- or herself). Of great concern in these fields of forensic identification which rely largely on subjective interpretation, however, is the issue of cognitive bias. While much scholarly attention has been devoted to the effect of a number of categories of cognitive bias on forensic decision making,[140] there has been little consideration of how they could also affect jury

136 Neal Feigenson, 'Jurors' Emotions and Judgments of Legal Responsibility and Blame: What Does the Experimental Research Tell Us?' (2016) 8(1) *Emotion Review* 26, 29.

137 See, eg, Teneille R Brown, 'The Affective Blindness of Evidence Law' (2011) 89(1) *Denver University Law Review* 47.

138 Simon A Cole, 'Forensics without Uniqueness, Conclusions without Individualization: The New Epistemology of Forensic Identification' (2009) 8 *Law, Probability and Risk* 223, 224.

139 Ibid.

140 See, eg, Forensic Science Regulator, *Cognitive Bias Effects Relevant to Forensic Science Examinations* (2015); Itiel E Dror et al, 'Cognitive Issues in Fingerprint Analysis: Inter- and Intra-Expert Consistency and the Effect of a "Target" Comparison' (2011) 208 *Forensic Science International* 10; Itiel E Dror et al, 'When Emotions Get the Better of

decision making. The following section examines two categories of bias that may influence jurors called upon to engage in image comparison with a view to determining identity—contextual bias and confirmation bias.[141]

Contextual bias

The first category of bias, contextual bias, has been well-researched and documented by the forensic science community.[142] This type of bias is concerned with 'whether and to what extent the results of forensic analyses are influenced by knowledge regarding the background of the suspect and the investigator's theory of the case'.[143] Numerous studies have demonstrated that knowledge of the suspect or the investigation, such as knowledge that the suspect has committed similar offences in the past or that he or she confessed to the offence upon arrest, can exert a significant influence on an analyst's forensic decision making.[144] In one well-known study, for example, fingerprint experts were asked to compare sets of prints that they had previously determined were a match. This time, however, they were provided with contextual information to suggest that the prints would not match. Of the five fingerprint experts involved in the study, four

Us: The Effect of Contextual Top-Down Processing on Matching Fingerprints' (2005) 19(6) *Applied Cognitive Psychology* 799; Saul M Kassin, Itiel E Dror and Jeff Kukucka, 'The Forensic Confirmation Bias: Problems, Perspectives,and Proposed Solutions' (2013) 2(1) *Journal of Applied Research in Memory and Cognition* 42; Itiel E Dror, David Charlton and Ailsa E Péron, 'Contextual Information Renders Experts Vulnerable to Making Erroneous Identifications' (2006) 156 *Forensic Science International* 74; Itiel E Dror and Simon A Cole, 'The Vision in "Blind" Justice: Expert Perception, Judgment, and Visual Cognition in Forensic Pattern Recognition' (2010) 17(2) *Psychonomic Bulletin & Review* 161; G Edmond et al, 'Contextual Bias and Cross-Contamination in the Forensic Sciences: The Corrosive Implications for Investigations, Plea Bargains, Trials and Appeals' (2014) 13 *Law, Probability and Risk* 1.

141 For a discussion of different categories of cognitive bias, see Forensic Science Regulator, *Cognitive Bias Effects Relevant to Forensic Science Examinations* (2015).

142 National Research Council of the National Academy of Sciences, *Strengthening Forensic Science in the United States: A Path Forward* (National Academies Press, 2009); Forensic Science Regulator, *Cognitive Bias Effects Relevant to Forensic Science Examinations* (2015).

143 National Research Council of the National Academy of Sciences, *Strengthening Forensic Science in the United States: A Path Forward* (National Academies Press, 2009), rec 8, [53]; Michael D Risinger et al, 'The Daubert/Kumho Implications of Observer Effects in Forensic Science: Hidden Problems of Expectation and Suggestion' (2002) 90(1) *California Law Review* 1.

144 Itiel E Dror, David Charlton and Ailsa E Péron, 'Contextual Information Renders Experts Vulnerable to Making Erroneous Identifications' (2006) 156 *Forensic Science International* 74.

changed their previous identification decision (with three of these four determining, in line with the contextual information, that the prints did not match).[145] In other studies, contextual bias has also been found to exist in the fields of handwriting comparison,[146] hair analysis,[147] DNA analysis[148] and bite mark analysis.[149]

The above research and real-life cases in which contextual bias is thought to have contributed to erroneous forensic identifications[150] raises the inference that knowledge of other incriminating evidence could affect the fact-finder's comparative analysis of CCTV images and the accused (and particularly so when the images are ambiguous or difficult to read).[151] To date, however, this issue has been largely unexplored. The case law indicates that courts have not been overly concerned with the issue of contextual bias in jury decision making, perhaps because the fundamental role of the fact-finder is to take into account *all* relevant information before arriving at a verdict. For this reason, it is simply not possible or desirable to 'blind' jurors to the type of contextual information that should generally be withheld from forensic analysts. In one matter where the issue was raised (a case in which the jury members were invited to compare samples of handwriting), the NSW Court of Criminal Appeal held that the jury's access to additional evidence relevant to the accused's guilt (such as evidence that she appeared to be in possession of keys to a post office box to which packages of

145 Ibid. See also Itiel Dror and Robert Rosenthal, 'Meta-analytically Quantifying the Reliability and Biasability of Forensic Experts' (2008) 53(4) *Journal of Forensic Sciences* 900; Itiel E Dror et al, 'When Emotions Get the Better of Us: The Effect of Contextual Top-Down Processing on Matching Fingerprints' (2005) 19(6) *Applied Cognitive Psychology* 799.

146 See, eg, Bryan Found and John Ganas, 'The Management of Domain Irrelevant Context Information in Forensic Handwriting Examination Casework' (2013) 53(2) *Science and Justice* 154.

147 See, eg, Larry S Miller, 'Procedural Bias in Forensic Science Examinations of Human Hair' (1987) 11(2) *Law and Human Behavior* 157.

148 See, eg, Itiel E Dror and Greg Hampikian, 'Subjectivity and Bias in Forensic DNA Mixture Interpretation' (2011) 51(4) *Science and Justice* 204.

149 See, eg, Mark Page, Jane Taylor and Matt Blenkin, 'Context Effects and Observer Bias—Implications for Forensic Odontology' (2012) 57(1) *Journal of Forensic Sciences* 108.

150 US Department of Justice, Office of the Inspector General, *A Review of the FBI's Handling of the Brandon Mayfield Case* (2006); Anthony Campbell, *The Fingerprint Inquiry Report* (APS Group Scotland, 2011).

151 As Saul Kassin notes, research into 'corroboration inflation' indicates that 'ambiguity is a moderating condition': Saul M Kassin, 'Why Confessions Trump Innocence' (2012) 67(6) *American Psychologist* 431, 441.

cocaine were delivered) simply provided 'a context in which apparent similarities might well have been regarded by the jury as sufficient to support a conclusion that the appellant was the author of the post office box application'.[152]

It is possible, however, that contextual bias may be more problematic than is currently recognised when the jury is asked to analyse CCTV images in order to determine identity. The potential problem with indistinct images of an offender is that the acceptance of another piece of evidence in the trial (for example, evidence that the accused was in possession of a jersey that looked similar to that worn by the offender) may not just affect the assessment of the probability that the accused is the person depicted in the videos, but may in fact make the jury more likely to 'see' the accused in the video. In other words, instead of concluding that an indistinct image is more likely to be the accused in light of all the evidence in the trial, the fact-finder subconsciously uses the other evidence to resolve the ambiguity of the image. In this way, the other incriminating evidence affects the fact-finder's interpretation or 'reading' of the image and his or her ultimate conclusion about who is depicted in the images. This is a particularly dangerous form of reasoning when the other incriminating evidence is potentially untrustworthy. If evidence that may be unreliable, such as a confession that has been retracted, or the testimony of a police informant,[153] causes a fact-finder to 'see' the accused in an image, it may create an 'illusion of corroboration', thereby leading to an erroneous conviction.

Confirmation bias

Closely related to contextual bias, the second category of bias is confirmation bias, or the tendency to 'test hypotheses by looking for confirming evidence rather than potentially conflicting evidence'.[154] In the forensic science setting, this type of bias can occur when a reference sample is analysed *before* the crime scene

152 *R v Leroy* [2000] NSWCCA 302, [446] (Street J).

153 These kinds of evidence are recognised as being potentially unreliable in s 165 of the *Evidence Act 1995* (NSW).

154 Forensic Science Regulator, *Cognitive Bias Effects Relevant to Forensic Science Examinations* (2015), [1.2.1].

sample, leading the analyst to subconsciously look for features which match the already-examined reference sample when he or she turns to examine the crime scene sample. It may also occur when an analyst has knowledge about another analyst's conclusions before examining the material themselves.[155]

Forensic scientists can take steps to minimise confirmation bias. For example, the use of the ACE-V methodology may operate to reduce bias caused by the analyst's expectations. In the analysis stage, it is increasingly accepted that the unknown sample (for example, the fingerprint, bitemark or CCTV image) should be analysed first and observations of it should be recorded in writing before it is compared to known exemplar.[156] In this way, the analyst does not subconsciously attempt to match the patterns he or she sees in the two samples by reading features of the exemplar into the unknown sample. The implementation of 'blind verification' procedures, where an analyst who is unaware of the conclusions of the primary examiner also examines the samples, may also operate to reduce confirmation bias among forensic scientists.[157]

In the legal setting, confirmation bias may influence the decisions of fact-finders involved in comparative image analysis. During a criminal trial, the fact-finder will always view the 'known exemplar'—that is, the accused's face and body—prior to viewing the 'crime scene sample', or the CCTV images (that is, the jury will see the accused when he or she is arraigned at the outset of the proceedings and during the trial judge's opening remarks). Accordingly, it is possible that the fact-finder will search for features that match those of the accused in the CCTV evidence that is tendered in the proceedings. Similarly, as jurors are permitted to discuss the evidence in the jury room during breaks, it is possible that a fact-finder will be made aware of another's conclusion about the identity of the person in the images before arriving at such a conclusion him-or herself, and this knowledge

155 Ibid.

156 Itiel E Dror et al, 'Cognitive Issues in Fingerprint Analysis: Inter- and Intra-Expert Consistency and the Effect of a "Target" Comparison' (2011) 208 *Forensic Science International* 10, 12.

157 Forensic Science Regulator, *Cognitive Bias Effects Relevant to Forensic Science Examinations* (2015), [8.4].

may influence the fact-finder's decision about the identity of the person in the CCTV image.

Strategies to minimise the risk of injustice

A witness who purports to recognise an offender depicted in CCTV images can be cross-examined about the extent of his or her familiarity with the accused and about any other factors that may undermine the reliability of his or her evidence. An expert who testifies as to the similarities or differences between CCTV images and the accused can be cross-examined about his or her methodological approach and the reliability of his or her conclusions. But 'how does the adversarial process test the *decision-maker's* reliability as witness to these screened realities?'[158] The following section makes some suggestions about possible ways to reduce or minimise the risk that the fact-finder will arrive at an erroneous conclusion when tasked with comparing CCTV images of an offender with the accused in a criminal proceeding.

Evidence gathering by investigators

In many criminal proceedings involving unfamiliar face recognition, the fact-finder will be required to compare CCTV images of an offender with both: (i) the accused in person; and (ii) other images of the accused taken prior to the legal proceedings. The difficulty with requiring jurors to undertake this task is that unfamiliar face recognition 'can be disrupted by even superficial changes in the input image'.[159] The use of different cameras, as well as changes in viewpoint, environmental context and lighting all ensure that 'no face casts the same image twice'[160] Accordingly, it may be extremely difficult for the fact-finder to compare a clear, colour, eye-level image of an accused's face, taken at the time of his or

158 Richard K Sherwin, *Visualizing Law in the Age of the Digital Baroque: Arabesques and Entanglements* (Routledge, 2011), 6.
159 Rob Jenkins et al, 'Variability of Photos of the Same Face' (2011) 121(3) *Cognition* 313.
160 Ibid.

her arrest, with a grainy, monochrome, birds-eye level of the profile of an offender.

One solution to this problem is to attempt to reduce the differences between the crime scene and the reference photographs. To this end, it would be possible to film the suspect on the same CCTV surveillance system that captured the images of the offender. While this could help to ensure that the camera angle and camera lens, as well as the resolution and colour scheme of the images were the same,[161] it also carries a high risk of producing problematic (if not prejudicial) evidence. Biber has pointed out, when discussing a case in the United States in which the accused's counsel arranged for his client to be photographed at the crime scene wearing garb that was worn by the offender, that '[f]or an accused man to clothe himself in the costume of deviancy, performing the transgressive pose within the crime scene, as if offering himself up to the managerial gaze, presumes that there is nothing problematic or dangerous in the corporeal examination undertaken by law'.[162]

Another possible approach is to encourage investigators to locate as many relevant CCTV images of the offender at or about the time of the offence as possible. Viewing multiple images of the same person may increase the fact-finder's familiarity with the person's appearance, thereby improving the accuracy of the fact-finder's conclusion about the offender's identity. Further, in some cases, CCTV images of an offender taken before or after the offence will provide better reference material than images showing an offender actually committing the offence. In one of the cases I watched for my research, for example, CCTV images prior to the actual offence proved critical to the identification of the accused. In *R v Matia*, the accused was charged with manslaughter after he struck the deceased in a confrontation near his place of employment. The prosecution tendered 13 minutes of CCTV footage, taken from a variety of private businesses

161 For an explanation of how different image perspectives can change the appearance of a person's face, see: Gary Edmond et al, 'Law's Looking Glass: Expert Identification Evidence Derived from Photographic and Video Images' (2009) 20(3) *Current Issues in Criminal Justice* 337, 352.

162 Katherine Biber, *Captive Images: Race, Crime, Photography* (Routledge-Cavendish, 2007), 57. The case in question was *United States v Johnson* 114 F 3d 808 (1997), 813.

and spliced together to show the events as they occurred in chronological order. The footage showed the accused (a bodyguard) and a number of his colleagues following the deceased and his companions down Darlinghurst Road, King Cross. In some of the images, the accused was depicted clearly, and could be seen to be wearing 'a top with long, dark sleeves'.[163] The footage of the actual offence, however, was only three seconds in length and was taken from some distance by a camera located at the rear of a Flight Centre store.

Despite obviously capturing the last moments of the deceased's life, the footage in *R v Matia* did little to clarify the events that led up to his death. Although the jury were provided with software that enabled the relevant portion of the footage to be played repeated 'on a loop', it was common ground in the appeal proceedings that the accused simply could not be identified from that portion of the footage. Indeed, after watching it in court during the appeal proceedings, Hoeben CJ at CL observed that that the court would have to play it to themselves on a number of occasions before it would be possible to attempt to decipher what it depicted. After analysing the footage in private, the Court of Criminal Appeal dismissed the appeal against conviction, stating that

> [a]lthough the precise actions of the persons depicted are difficult to discern, it is clear that a security guard wearing a top with long, dark sleeves was next to the deceased as he appears to be falling and that the security guard had his left arm fully extended. For the reasons already stated, that security guard can only be the applicant.

Directions and procedural reforms

There are no standard directions in the NSW Bench Book dealing with in-court identification by a jury. This situation is undesirable as, '[j]ust as it is notorious that honest and convincing witnesses may be mistaken about their identifications ... so it is notorious among practitioners in the criminal courts that there are few

163 *R v Matia* [2015] NSWCCA 79, [103].

photographs that could not match several people equally convincingly'.[164] Without such a suggested direction, judges may be unwilling to unduly lengthen their communication with the jury by including one at their discretion, or may be required to formulate a direction unassisted. For example, at the conclusion of the trial in *R v Gibson*, counsel for the accused requested that the trial judge give a direction pursuant to s 165 about the comparative exercise to be undertaken by the jury. The trial judge, however, promptly indicated that he did not see any need for a direction of that sort.

In contrast to the position in NSW, jurors in England and Wales receive significantly more judicial assistance about how to determine the issue of identity in matters involving CCTV images. While it is not mandatory that they be directed about the dangers involved in making an identification for themselves after viewing images of the offender, such a direction may be given if it is warranted in light of the circumstances of the case.[165] In *R v Dodson and Williams*, the Court of Appeal noted the perilous nature of permitting the jury to determine identity by comparison between images and the accused alone or with other evidence indicative of an accused's guilt, and held that a jury undertaking such a task should be reminded to consider (among other things)

> the quality of the photographs, the extent of the exposure of the facial features of the person photographed, evidence, or the absence of it, of a change in the defendant's appearance and the opportunity a jury has to look at a defendant in the dock and over what period of time.[166]

The Judicial College's *Crown Court Compendium* contains a comprehensive sample direction which advises the members of the jury of the need for caution when they undertake their comparative task.[167] It outlines in detail the matters that may affect the reliability of their identification, and advises that it is important to 'look for any features which are common to both, and for any features which are

164 Author Unknown, 'Criminal Law Weekly, CLW 15/31/2'.
165 *R v Shanmugarajah* [2015] EWCA Crim 783; *R v Downey* [1995] 1 Cr App R 547.
166 *R v Dodson and Williams* (1984) 79 Cr App R 220, 229.
167 Judicial College, *The Crown Court Compendium Part 1: Jury and Trial Management and Summing Up* (May 2016), 15–8.

different'.[168] The text of this direction is set out in full in Appendix 2. In 2012, after referring to the English approach outlined above, the New South Wales Law Reform Commission (NSWLRC) recommended that the *Criminal Trial Courts Bench Book* be amended to include a suggested direction that would 'draw attention to the considerations that the jury needs to have in mind when asked to determine whether a person shown in the image is the accused'.[169] These recommendations have not yet been implemented.

However, juries tasked with determining the issue of identity after analysing CCTV images may require more guidance than that proposed by the NSWLRC. In addition to being warned about the potential unreliability of the evidence which they themselves generate, jurors may require further instruction on matters of procedure. Currently, it appears that jury members receive limited information about how to perform their comparative task. As occurred in *Gibson*, they will probably be informed by the prosecutor during his or her opening address that the case will require them to compare images with the accused in the courtroom.[170] They may also be informed by the trial judge, during his or her summing up, that they are required to compare the images that have been adduced in evidence with the appearance of the accused in the courtroom. This state of practice is not ideal. As noted above, there are several reported instances where jurors have demonstrated their lack of knowledge about how to undertake the task required of them. Despite this, to adopt the words of Robert Howe QC, who served as a jury member in England, 'at no point in the Postman Pat-style explanations about 'how court works' that are given to jurors is it properly explained *what they are actually expected to do*'.[171] The lack of explanation about the process and procedure they are required to follow may be worrying to some jurors and may occupy their time unnecessarily, thereby distracting them from their task. In *R v Carroll; R v Miller*, for example, a case observed as research for this thesis, the jury sent the trial judge a note during the proceedings asking whether they could see the

168 Ibid.
169 New South Wales Law Reform Commission, *Jury Directions*, Discussion Paper No 16 (2012), rec 5.6.
170 *R v Gibson*, (District Court of New South Wales, July 2015).
171 Robert Howe, 'Why Too Much Legal Experience Can Subvert Jury Trial', *The Times* (online), 3 December 2009, (emphasis added).

surveillance footage that was being played in the courtroom from a closer range. It was only at this point that they were then advised that, once tendered, the surveillance footage would become an exhibit that they would have access to in the jury room.

Directions to jurors about the comparative task which they will be asked to undertake should be given at the outset of the trial. At this point, jurors should be clearly informed that the issue of identification is in dispute and that they will be required to determine whether a person depicted in CCTV images is the accused. Additional information could then be provided about methodological approaches to the task, bias, and bias minimising strategies. For example, the jury could be advised that:

- in addition to listening to testimonial evidence, their role in these particular proceedings will require them to familiarise themselves with the appearance of the accused as much as possible in the courtroom environment;
- they can and should undertake a comparison of any CCTV images in evidence with the accused in person, as he or she appears in the courtroom, as opposed to relying on their memory of the accused to undertake the task for the first time in the jury room;
- they do not have the advantage of comparing the images to other potential suspects, as would an eyewitness participating in a formal identification procedure;
- to undertake the initial comparison on their own and to make notes of their observations to discuss with other jurors at a later stage;
- several people may make a mistaken identification from a comparison of images with other evidence and the accused; and
- the identification of a 'true dissimilarity', or a dissimilarity that cannot be 'discounted as an artefact or resulting from a distortion'[172] would

172 Paul C Giannelli, Edward J Imwinkelried and Joseph L Peterson, 'Reference Guide on Forensic Identification Expertise' in Federal Judicial Centre and National Reseach

require them to conclude that the accused and the offender were not the same person.

In addition to developing model directions in this area, several practical and procedural measures could be adopted to assist jurors asked to determine the issue of identification by comparing CCTV images with the accused. First, consideration could be given to ensuring that the courtroom environment is conducive to permitting the jury to undertake its visual comparison between the offender depicted in CCTV images and the accused. In NSW, courtrooms vary greatly in their size, layout and the equipment they contain to display audio-visual material. In a matter involving CCTV evidence in which identity is contested, consideration could be given to running the trial in a courtroom which provides the jury members with a clear, unrestricted view of the dock area or any other area in which the accused will be seated. If individual television screens are not available to each juror (and they were not in any of the cases I observed), the size of the courtroom and the location of any television screens upon which CCTV imagery will be viewed should also be taken into consideration to ensure that the jury is able to clearly see CCTV imagery, while at the same time comparing this imagery to the accused.

Second, during the course of the trial, CCTV images could be displayed for a set period of time, and jurors invited to take the opportunity to compare the images to the accused. As well as highlighting the importance of the comparative task, this approach would provide a dedicated and safe space for jurors to reflect, individually, on the appearance of the offender in the CCTV images and the accused. It would also eliminate the need for the jury to perform their comparative exercise while also attending to other evidence and, if it occurred early in the proceedings, it could help to minimise the risk that other incriminating evidence will influence the fact-finder's decision about the identity of the person in the CCTV images.

Council of the National Academies (eds), *Reference Manual on Scientific Evidence* (3rd ed, 2011), 75.

Third, in appropriate cases—that is, in cases where there is a clearly demarcated dispute about what can be seen in CCTV imagery and a real risk that a jury, once primed to see a certain feature or item in the image, will accept that it is visible—consideration could be given to playing the imagery to the jury before the legal representatives of the parties make any suggestions about what can be seen in it.

Finally, as a matter of practice, consideration should be given to creating a record (either visual, written or both) of the accused's appearance in the courtroom during the trial proceedings. This issue may have a bearing on a number of a number of matters to be determined in an appeal, including the appropriateness of evidential decisions made by the trial judge and whether the jury's verdict was unreasonable or unsupported by the evidence.[173] In the hearing of the appeal in *Smith v The Queen*, for example, Gleeson CJ expressed frustration at not having any information about the appearance of the accused at the trial, and predicted that '[t]he time will come, you know ... and the time has come in some countries where an appellate court considering a matter like this will have in front of it a picture of the accused.'[174] To date, however, no effort is made to record the nature of the accused's appearance at the trial stage as a matter of course, despite the fact that the accused is effectively an exhibit in the proceedings. In *R v Nguyen*, however, the trial judge did attempt such a task, noting as follows:

> Prior to the officers giving evidence I myself had noticed differences between the appearance of each of the accused in the dock and their appearance as depicted in photographs tendered in evidence in the trial, some of which photographs had been taken at about the time of their arrest and some earlier. After the conclusion of evidence but prior to submissions on the voir dire I indicated to counsel in a document which became MFI 14 and subject to an order it be kept in the Court file my impressions in this regard. No counsel sought to argue against the existence of the differences reflected in the document and which in part at least accorded with the evidence given by the police officers.

173 As the New South Wales Court of Criminal Appeal was required to do in *Slater v The Queen* [2015] NSWCCA 310.

174 Transcript of Proceedings, *Smith v The Queen* [2001] HCATrans 214 (25 May 2001).

> As a matter of convenience, I attach a copy of MFI 14 to these reasons.[175]

Conclusion

This chapter examines a topic that is largely unexplored in the academic literature and case law in Australia or overseas—the practice of permitting the jury to come to a conclusion about identity by comparing CCTV images with other images and the accused in the courtroom. The existing case law indicates that courts consider this practice straightforward and unproblematic. In practice, however, it appears that jurors struggle with the task of comparing images in the legal context, and find it difficult to compare 'across dimensions' (that is, to compare CCTV imagery with an accused in person). Of great concern, however, is the fact that a number of factors may undesirably affect the fact-finder's decision-making process in this respect. For example, many of matters that make 'dock identifications' and 'pattern matching' expert evidence potentially unreliable apply equally to the fact-finder who is required to compare crime scene images and reference images during criminal proceedings. For this reason, greater judicial scrutiny is needed of the practice of permitting jurors to compare images unaided and reform is needed to safeguard against miscarriages of justice.

175 *R v Nguyen* [2006] NSWSC 834, [26].

8. CONCLUSION

In *Visualizing Law in the Age of the Digital Baroque,* Richard Sherwin notes that trial reality is 'second hand reality'.[1] Since its inception, the adversarial system of justice has required individual items of evidence to be amassed, collated, scrutinised and weighed before the fact- finder makes a valiant attempt to construct a 'facsimile' of the past.[2] It is little wonder then that CCTV images, with their aura of objectivity and their promise to show 'first hand reality' or 'the truth', have caused a marked shift in the evidential landscape of criminal proceedings. Today, it is not unusual for a prosecutor's brief of evidence to contain painstakingly edited compilations of surveillance footage (along with software to assist in its viewing and chronologies outlining the events depicted on it),[3] or for defence lawyers to advise their clients to acquire CCTV evidence in preparation for their defence.[4]

The increased use of CCTV images in the criminal justice context has not been the subject of rigorous or systematic analysis by legal scholars. As a consequence, its implications for the administration of justice remain largely unexplored. As stakeholders grapple with the evidence in the course of their everyday duties, complicated questions are beginning to arise. How should investigators use CCTV imagery in interrogations[5] and how effective is it in facilitating admissions of guilt? Does permitting an eyewitness to view CCTV imagery enhance the accuracy of his or her testimony, or can it in fact 'manufacture memory'?[6] In what

1 Richard K Sherwin, *Visualizing Law in the Age of the Digital Baroque: Arabesques and Entanglements* (Routledge, 2011), 41.

2 Keith A Findley, 'Innocents at Risk: Adversary Imbalance, Forensic Science, and the Search for Truth' (2008) 38 *Seton Hall Law Review* 893, 895.

3 See, eg, *R v Matia* [2015] NSWCCA 79.

4 See, eg, Webster Lawyers, *CCTV Footage—Don't Assume Police Will Obtain all the Evidence* <http://www.websterslawyers.com.au/cctv-footage-dont-assume-police-will-obtain-all-the-evidence/>.

5 See, eg, *R v Hufnagl* where it was held that it would be unfair to admit incriminating evidence elicited during an interrogation when investigators misrepresented what could be seen in the relevant CCTV images: *R v Hufnagl* [2008] NSWDC 134.

6 Katherine Biber, *Captive Images: Race, Crime, Photography* (Routledge-Cavendish, 2007), 76.

circumstances should CCTV imagery be released to the media and the public?[7] How much court time and expense is avoided when CCTV images show the commission of the actual offence?[8] What impact does CCTV imagery have on the sentencing of offenders?

Of all the possible evidential uses for CCTV images, perhaps the most significant is to establish the identity of an offender. Indeed, the use of expert evidence to establish the identity of a person depicted in a CCTV image has generated a substantial amount of academic debate and judicial discourse.[9] However, the alternative approach—to rely on recognition evidence based on a post-offence viewing of CCTV images—has been largely unexplored in the evidence law literature. This thesis addresses this gap in knowledge by analysing the complexities associated with admitting and using evidence that a witness recognises an offender depicted in CCTV images in a criminal prosecution, or requesting the fact-finder to undertake the task of recognition him- or herself. Relying primarily on the doctrinal research method, but also drawing upon insights gathered from observation research, media reports and other disciplines, this thesis has demonstrated that recognition evidence based on CCTV images is not being adduced and used in a way that helps to achieve the primary aims of the *Evidence Act 1995*.

There is little doubt that the primary goal of the *Evidence Act 1995* (NSW) is to promote accurate fact- finding. As legal scholars Roger Park and Michael Saks have noted, '[a]ccuracy is essential to accomplishing the goals of substantive law. For the substantive law to work, the fact-finding mechanism must be accurate

7 Elizabeth G Porter, 'Taking Images Seriously' (2014) 114 *Columbia Law Review* 1687; *Director of Public Prosecutions v Woodhead (No 3)* [2016] VSC 471; *Director of Public Prosecutions v Woodhead (No 2)* [2016] VSC 470.

8 In one of the matters observed as part of my research for this thesis, the trial judge observed that the CCTV images were particularly useful in the prosecution as it was not necessary to rely on witness recollections or expert reconstruction of events that occurred unexpectedly and quickly: *R v Perks*, (District Court of New South Wales, September 2014).

9 See, eg, Gary Edmond et al, 'Law's Looking Glass: Expert Identification Evidence Derived from Photographic and Video Images' (2009) 20(3) *Current Issues in Criminal Justice* 337; *Honeysett v The Queen* [2014] HCA 29.

enough to enforce its prohibitions and dispense its rewards'.[10] In order to promote accurate fact finding, it is important that the fact-finder has access to information that is relevant to the resolution of the dispute. A failure to take into account relevant information 'will obviously increase the chances of [the fact-finder] reaching an incorrect verdict'.[11] This principle is reflected in s 56 of the *Evidence Act 1995*, which provides that relevant evidence is *prima facie* admissible in a legal proceeding, and confirms that irrelevant evidence is inadmissible.

Despite deliberately setting a low threshold for the admissibility of evidence, s 56 has proven problematic when applied to recognition evidence based on CCTV images. In *Smith v The Queen*, the High Court of Australia held that the evidence of two police officers who claimed to recognise the appellant in CCTV images of a bank robbery was irrelevant, and therefore inadmissible. While the factual findings of the Court can be challenged, the *ratio decidendi* of the case—that the fact that the police officers were in no better position than the jury to recognise the appellant in the images meant that their evidence was irrelevant—is particularly questionable. Indeed, it appears to be at odds with the most recent pronouncement of the High Court on the relevance rule—namely, that it is concerned with the capability of the evidence to affect findings of fact, and will generally only operate to exclude evidence that is 'so inherently incredible, fanciful or preposterous that it could not be accepted by a rational jury'.[12] In their 2005 report on the uniform Evidence Acts, the ALRC, NSWLRC and VLRC expressed concern about the judgment, but decided not to interfere with it as its unique factual basis meant that it could be distinguished in appropriate cases.[13] However, as Chapter 3 has demonstrated, fifteen years later the judgment is often misunderstood and misapplied, with the consequence that potentially probative evidence relating to the identity of an offender is regularly being withheld from the fact-finder. It is also difficult to apply in practice as the relevance of evidence

10 Roger C Park and Michael J Saks, 'Evidence Scholarship Reconsidered: Results of the Interdisciplinary Turn' (2006) 47 *Boston College Law Review* 949, 1030.

11 Jeremy Gans and Andrew Palmer, *Australian Principles of Evidence* (Cavendish, 2nd ed, 2004), 5, [1.2.1.1].

12 *IMM v The Queen* [2016] HCA 14, [39].

13 Australian Law Reform Commission, New South Wales Law Reform Commission and Victorian Law Reform Commission, *Uniform Evidence Law*, Report No 102 (2005) [9.22]–[9.23].

may depend on external factors, such as the courtroom in which the proceedings are heard.

Despite its significant influence on evidence law jurisprudence, the judgment in *Smith* has not presented a complete barrier to the admission of recognition evidence based on CCTV images. It has been distinguished in a number of cases, generally when the appearance of the accused has changed between the time of the offence and the time of the trial, or when the recognising witness is familiar with aspects of the accused's appearance or mannerisms which would not be apparent to the fact-finder. In these cases, the opinion rule, which was designed to prevent the admission of superfluous evidence that would be of little assistance to the fact-finder, has also presented a barrier to admissibility. The difficulty in this context is that the exceptions are not drafted in such a way as to easily accommodate recognition evidence based on CCTV images. Is the evidence based on the witness' perception of a 'matter or event' so as to enable it to fall within the lay opinion exception to the rule, or is it specialised knowledge based on a person's experience with a person, and therefore admissible pursuant to the exception for expert evidence? Judicial uncertainty about these questions raises the possibility that probative recognition evidence based on CCTV images will again be held to be inadmissible pursuant to the opinion rule. It also undermines another of the aims of the *Evidence Act 1995* (NSW)—namely, to avoid any adverse impact on the time and cost of litigation. The unsettled nature of the case law in this area has had the inevitable consequence of increasing the costs of litigation as legal argument about the admissibility of evidence must be conducted prior to the commencement of proceedings (and may also occupy the time of appellate courts).

To remedy the difficulties caused by the application of the opinion rule to recognition evidence based on CCTV images, this thesis has suggested that it be made clear that the lay opinion exception is the appropriate exception to consult when determining the admissibility of the evidence. However, the existing exception for lay opinion evidence should be amended to include a requirement that the witness be in a better position than the fact-finder to draw the relevant

inference from the facts before the evidence is admissible. This would ensure that evidence of no utility to the Court, such as evidence from a person with no prior familiarity with the accused before his or her arrest, would be inadmissible. However, to resolve some of the difficulties inherent in determining this factual question—the 'better position' question—it should be clarified that the focus of the inquiry should be on the relative positions of the fact-finder and the witness *at the outset of the trial*. This would ensure that the answer to the question of the admissibility of the evidence would not depend on factors such as the size and shape of the courtroom in which the proceedings are held, or the length of the proceedings.

While Chapters 3 and 4 focus primarily on ensuring that relevant evidence is placed before the fact-finder in order to enhance the accuracy of the fact finding process, Chapter 5 moves the discussion to some of the dangers of recognition evidence based on CCTV images. It notes that, after satisfying the relevance and opinion rules, the admission and use of the evidence is largely unregulated. It does not fall within the definition of 'identification evidence' in Part 3.9 of the Act, and hence there are no procedural rules about the collection of the evidence that need to be adhered to before it is admissible. Further, it is not mandatory for a court to direct the jury about the need for caution before accepting the evidence.

The permissive approach of the Act to the admission and use of recognition evidence based on CCTV images is compounded by the fact that there are no guidelines or rules regulating the collection and handling of the evidence at the investigative stage. None of this would be problematic, however, if the evidence was generally accurate or trustworthy. However, while it appears that the evidence may have some advantages over traditional eyewitness recognition evidence, psychological research and case law indicates that there are a number of factors which may undermine its reliability. Some of these are 'estimator variables' that are well known in the eyewitness identification literature, such as the age of the witness, while others are unique to recognition based on images, such as the nature and quality of the images, the parts of the offender that are depicted and the background environment shown in the image. Others are 'system variables', such

as the way in which the evidence is collected and handled at the investigative stage.

In addition to the risk that it may be unreliable, recognition evidence based on CCTV images shares other features of eyewitness identification evidence that make it particularly hazardous. As with eyewitness evidence, it is often highly probative, and yet by its very nature it is difficult to test. Further, the experience of the criminal justice system is beginning to hint at the fact that it may play a role in miscarriages of justice. Accordingly, to further the aims of the *Evidence Act 1995* (NSW)—in particular, to promote accurate fact finding and minimise the risk of wrongful convictions—it is imperative that the collection, handling, admission and use of recognition evidence based on CCTV images be further regulated and scrutinised.

Chapter 6 explores the various ways in which this could be achieved, focusing primarily on the practices and procedures of law enforcement officers at the investigative stage. There is a vast amount of psychological literature demonstrating that the reliability of eyewitness identification evidence depends to a large extent on the procedures police use when collecting the evidence (that is, the procedures adopted when conducting line-ups, photographic arrays or any other identification procedure). As recognition evidence based on CCTV images may also be adversely affected by suggestion, such as priming and contamination, it is vitally important to also regulate the way in which the evidence is collected by police officers. After noting that it is vastly preferable that any reform of the law in this area be finalised after widespread consultation with relevant stakeholders—in particular those with an academic interest in evidence law or psychology or those with practical experience in the conduct of criminal prosecutions—the chapter analyses the different ways to ensure that the quality of recognition evidence based on CCTV images is preserved from the outset. It notes the different approaches taken in this regard in three overseas jurisdictions—Canada, England and Wales, and New Zealand—before concluding that it is preferable to enact legislation which covers certain key aspects of concern, including the way recognition procedures are organised and conducted. It also

concludes that recognition evidence based on CCTV images should be the subject of a mandatory judicial direction under s 116 of the Act.

The final chapter in this thesis, Chapter 7, examines the difficulties that arise when the fact-finder is asked to view CCTV images to arrive at a conclusion about whether an offender and the accused are the same person. In these cases, the fact-finder is in effect the *source* of the recognition evidence based on CCTV images, and the person falling to be recognised is a person with whom they have a low level of familiarity. The chapter notes that expressions of judicial disapproval about expert 'facial and body mapping' evidence, combined with academic criticism about its veracity, indicate that it is likely that those charged with determining the facts in criminal proceedings will be asked to undertake this comparative task more regularly in the future.

As with disputed handwriting and voice recordings, the lay fact-finder in NSW is assumed to have the sufficient knowledge and skills to compare a reference sample (the accused) with a sample connected to the offence (a CCTV image) and draw conclusions from the comparison. This assumption, however, which appears to be largely a consequence of our highly visual modern culture, is misplaced. As this chapter demonstrates, there are numerous dangers inherent in the comparative task that have yet to be acknowledged or addressed. While the confidentiality of jury deliberations and the fact that juries are not required to provide reasons for their decisions makes it difficult to ascertain how proficient jurors are at the task in practice, psychological research indicates that error rates in unfamiliar face matching 'are similar to the error rates observed in eyewitness identification studies'.[14] Further, factors that affect the quality of eyewitness evidence and pattern-matching forensic science evidence, such as suggestion and bias, may also affect the accuracy of the fact-finder's decision. Accordingly, to ensure accuracy in fact finding and minimise the risk of wrongful conviction, it is important that consideration be given to adopting strategies to assist the jury to undertake its surprisingly complex task.

14 Won-Joon Lee et al, 'Matching Unfamiliar Faces from Poor Quality Closed-Circuit Television (CCTV) Footage: An Evaluation of the Effect of Training on Facial Identification Ability' (2009) 1(1) *AXIS* 19.

It is possible that the passage of time will render many questions in this thesis, including those about the appropriate role of the fact-finder in criminal proceedings, obsolete. The reliability of expert evidence about identification may improve to an acceptable standard if those who produce it adopt strategies to minimise contextual bias; develop methodologies that can be replicated and tested; and implement 'competency testing, certification testing and proficiency testing'.[15]

Until this time, however, there is no doubt that evidence of recognition of offenders from CCTV images will continue to increase exponentially. In the United Kingdom, for example, Detective Chief Inspector Mick Neville believes the use of imagery in investigations and prosecutions represents 'the third revolution in forensics'.[16] In 2016, he noted that 'we solve about two thousand cases a year with fingerprints and another two thousand with DNA ... This year, we solved twenty-five hundred crimes using imagery, and it's about ten times cheaper than those methods.'[17] The growth of recognition evidence based on CCTV images makes it imperative that all stakeholders in the criminal justice system are aware of the power and the pitfalls of the evidence. It is also essential that our laws of evidence are able to accommodate the evidence. However, there is virtually no scholarship exploring when and how the evidence should be presented to the fact-finder, in what manner it should be presented, and how it should ultimately be used in the resolution of a criminal disputes. In this thesis, I have addressed these questions, analysing the complexity of applying the relevance and opinion provisions of the *Evidence Act 1995* (NSW) to recognition evidence based on CCTV images, highlighting the strengths and weaknesses of the evidence, and exploring the practice of permitting the fact-finder to attempt the recognition of an unfamiliar face—the accused—from CCTV imagery. In each

15 Expert Working Group on Human Factors in Latent Print Analysis, *Latent Print Examination and Human Factors: Improving the Practice through a Systems Approach* (US Department of Commerce, National Institute of Standards and Technology, National Institute of Justice, 2012), rec 9.5. See also recs 3.3 and 3.9.

16 Keefe, Patrick Radden, 'The Detectives Who Never Forget a Face', *The New Yorker* (online), 22 August 2016 <http://www.newyorker.com/magazine/2016/08/22/londons-super-recognizer-police-force>

17 Ibid.

of these areas I have suggested options for reform and areas requiring further investigation in order to ensure that the laws of evidence in NSW, and consequently the criminal justice system, continues to operate fairly and efficiently.

9. APPENDICES AND BIBLIOGRAPHY

Appendix 1 – List of cases citing *R v Smith*

In reverse chronological order:

1. *R v Poile* [2016] ACTSC 262
2. *Miller v R (No 2)* [2016] NSWCCA 158
3. *Andreou v Martin* [2016] NTMC 006
4. *Zanon v State of Western Australia* [2016] WASCA 91
5. *R v Kimura (No 1)* [2016] NSWSC 568
6. *Slater v R* [2015] NSWCCA 310
7. *Miller v R* [2015] NSWCCA 206
8. *Marsh v R* [2015] NSWCCA 154
9. *Meade v R* [2015] VSCA 171
10. *Haidar v The Queen* [2015] NSWCCA 126
11. *R v Lambaditis* [2015] NSWSC 182
12. *Murrell v The Queen* [2014] VSCA 334
13. *R v Sterling; R v McCook* [2014] NSWDC 199
14. *R v Maiolo (No 3)* [2014] SASCFRC 89
15. *Smart v Clarke* [2014] WASC 104
16. *R v Burton* [2013] NSWCCA 335
17. *R v Dastagir* [2013] SASCFC 109
18. *DPP (Cth) v Fattal* [2013] VSCA 276
19. *Murdoch (A pseudonym) v The Queen* [2013] VSCA 272
20. *R v SMJ* [2013] SASCFC 96
21. *R v Brease* [2013] QCA 249
22. *Honeysett v The Queen* [2013] NSWCCA 135
23. *R v Meade (Ruling No 4)* [2013] VSC 257
24. *R v Lovett (No 3)* [2013 WASC 102
25. *Bartlett v The Queen* (No 2) [2013] WASC 83
26. *R v Dastagir* [2013] SASC 26
27. *Strauss v Police* [2013] SASC 3
28. *Tasmania v Chatters* [2013] TASSC 61
29. *Dupas v The Queen* [2012] VSCA 328
30. *R v Banhelyi* [2012] QCA 357
31. *R v Bacon* [2012] QCA 340
32. *R v Kay* [2012] QCA 327

33. *Gilham v The Queen* [2012] NSWCCA 131
34. *Police v M, M* [2012] SASC 83
35. *Alameddine v The Queen* [2012] NSWCCA 63
36. *Aytugrul v The Queen* [2012] HCA 9
37. *BBH v The Queen* [2012] HCA 9
38. *R v Stamp* [2012] NTSC 18
39. *DSJ v The Queen; NS v The Queen* [2012] NSWCCA 9
40. *Anandan v The Queen* [2011] VSCA 413
41. *R v Amatto* [2011] NSWDC 194
42. *R v Smith (No 5)* [2011] NSWSC 1459
43. *Roach v The Queen* [2011] HCA 12
44. *Tema v State of Western Australia* [2011] WASCA 41
45. *R v A, A* [2010] SASC 126
46. *Bullman v Debnam* [2010] ACTSC 97
47. *R v Hennig* [2010] QCA 244
48. *R v Tanner* [2010] SADC 128
49. *R v Mahay & Ors* [2010] NSWDC 342
50. *Trajkoski v Director of Public Prosecutions (DPP) (WA)* [2010] WASCA 119
51. *Jackson v Lithgow City Council* [2010] NSWCA 136
52. *Manyam v State of Western Australia* [2010] WASCA 107
53. *Longmair v Bott* [2010] NTSC 30
54. *R v Winters* [2010] SASC 100
55. *Stubley v State of Western Australia* [2010] WASCA 36
56. *Police v Murtagh* [2009] TASMC 5
57. *R v Ogawa* [2009] QCA 307
58. *R v Dupas* (No 3) [2009] VSCA 202
59. *State of Western Australia v Bilos* (No 2) [2009] WASCA 2
60. *State of Tasmania v RDP* [2009] TASSC 72
61. *Beverland v The State of Western Australia* [2009] WASCA 2
62. *R v Williams* [2010] QCA 411
63. *Martin v State of Tasmania* [2008] TASSC 66
64. *R v Baladjam (No 48)* [2008] NSWSC 1467
65. *State of Western Australia v Bilos* [2008] WASC 226
66. *Irani v R* [2008] NSWCCA 217
67. *State of Tasmania v Howlett* [2008] TASSC 38
68. *R (Cth) v Baladjam (No 34)* [2008] NSWSC 1455
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70. *Tims v Police* [2008] SASC 141
71. *HML & Ors v R* [2008] HCA 16
72. *R v Baladjam (No 11)* [2008] NSWSC 1436
73. *R v Baladjam (No 7)* [2008] NSWSC 756
74. *Dair v The State of Western Australia* [2008] WASCA 72

75. *Trudgett v The Queen* [2008] NSWCCA 62
76. *Nguyen & Ors v R* [2007] NSWCCA 363
77. *Lodhi v R* [2007] NSWCCA 360
78. *Evans v R* [2007] HCA 59
79. *Azarian v State of Western Australia* [2007] WASCA 249
80. *Nicolaides v State of Western Australia* [2007] WASCA 2003
81. *R v Liu* [2007] QCA 113
82. *R v Robinson* [2007] QCA 099
83. *R v Truong* [2007] NTSC 20
84. *Cornwell v R* [2007] HCA 12
85. *R v Rollason and Jenkins; Ex parte Attorney-General (Qld)* [2007] QCA 065
86. *Murdoch v R* [2007] NTCCA 1
87. *R v RGP* [2006] VSCA 259
88. *R v Khanh Hoang Nguyen* [2006] NSWSC 834
89. *MJH v State of Western Australia* [2006] WASCA 167
90. *R v Jung* [2006] NSWSC 658
91. *R v Hien Puoc Tang* [2006] NSWCCA 167
92. *R v Lodhi* [2006] NSWSC 641 360
93. *Phillips v The Queen* [2006] HCA 4
94. *R v Murdoch (No 4)* [2005] NTSC 78
95. *Dye v Western Australia* [2005] WASCA 239
96. *R v Abdallah* [2005] NSWCCA 365
97. *R v Drollett* [2005] NSWCCA 356
98. *Donaldson v Western Australia* [2005] WASCA 196
99. *R v Tracey (No 6)* [2005] NSWCCA 331
100. *R v Marsh* [2005] NSWCCA 331
101. *Neal v The Queen* [2005] TASSC 70
102. *R v Solomon* [2005] SASC 265
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Appendix 2 – Crown Court Compendium sample direction

Example – CCTV Comparison by the Jury

You do not have any evidence of this incident from an eye-witness. However, there is CCTV footage and you have got photographs that have been made from that. You are asked to compare D against the person in the footage and photographs.

The prosecution say that you can be sure that it is D. The defence say that you cannot be sure of that, and that (summarise any argument put forward e.g. that the quality of the footage / images makes it impossible / unsafe to make any comparison; or that comparison shows that these are two different people).

When you compare D against the person in the footage / photographs, you should look for any features which are common to both, and for any features which are different. By 'features' I mean both physical appearance and also other characteristics such as the way a person walks, stands, uses gestures and so on.

When making your comparison you must be cautious for the following reasons.

- Experience has shown that when one person identifies another, it is possible for the person to be mistaken, no matter how honest and convinced they are. Also, the fact that several people identify a person does not mean that the identification must be correct. A number of people may all be mistaken, and you yourselves must have this in mind when you are making your comparison.

- Although you have been able to look at D during this trial in good light, at a relatively close distance and without any obstructions or distractions, none of you knew D beforehand, so your ability to identify him is not based on previous knowledge or having seen him in several different situations before.

- D's appearance has / may have changed since the time of the incident, and you must not speculate about what he looked like then. [Any points on this topic by either party should be summarised here.]

- [If the jury have a photograph known to be of D and taken at or close to the time of the alleged offence] You have a photograph of D taken on / about (date). You can compare this with the footage / photographs but you must still keep in mind the points I have just raised.

- The quality of the footage / photographs may affect your ability to make a comparison. You should take account of these points: (specify any characteristics relied on by either party e.g. relative position of camera(s) and person photographed (in particular the person's face), distance, focus, colour / monochrome, constant / intermittent, lighting, obstruction(s)). If you decide that the quality of the footage / photographs does not allow you safely to make any comparison with D, you should not try to do so. However, if you are satisfied that the quality is good enough to allow you to make a comparison, you can study the footage / photographs for as long as you wish.

- The footage / photographs that you have are only two-dimensional and so do not provide the same amount of information as someone at the scene would have. Seeing footage / photographs from the time of the incident is not the same as witnessing it for yourselves. Having said that, a person at the scene only sees the incident once, usually without any warning that it is going to happen; but you have had the advantage of being able to study the footage / photographs several times.

- If you decide that the person shown on the footage / photographs is similar to D, even in several ways, this does not automatically mean that the person shown must be D.

You must also bear in mind that this is only part of the evidence in the case. (Identify any evidence which is capable of supporting, not capable of supporting

or capable of undermining the evidence from which the jury are invited to conclude that the person on the footage / photographs is D.)

If you are sure, having considered all of the evidence, that the person shown on the footage / photographs is D, you must then decide whether he is guilty of the offence(s) with which he is charged. If you are not sure that the person on the footage / photographs is D, you must find D not guilty.

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