

MISTAKEN EYEWITNESS IDENTIFICATION AND WRONGFUL CONVICTION IN THE UNITED STATES

Annemarie Shea*

A INTRODUCTION

In 1984, when Jennifer Thompson was a twenty-two year old college student in Burlington North Carolina, a man broke into her home, held a knife to her throat and raped her.¹ During the attack she studied her assailant's face and body, trying to memorise anything that would help her identify the man and ensure that he would pay for his crimes. When she went down to the police station that same day, she picked Ronald Cotton from a photo and later from a line-up. Police reported that they had never seen a victim so composed, so determined, so sure.² Based on Jennifer Thompson's testimony, Ronald Cotton - who was also twenty-two years old at the time- was convicted and sentenced to life in prison.³ Cotton appealed and was retried in 1987.⁴ During the second trial, Bobby Poole, who was incarcerated in the same prison as Cotton and had confessed to his cellmate that he was Thompson's actual assailant, was brought into the courtroom. When asked to identify him Jennifer Thompson assertively replied 'I have never seen him in my life. I have no idea who he is.'⁵ Cotton was convicted again. Thompson, haunted by the horrific sexual abuse she had sustained, was nevertheless able to sleep soundly reassured that the man who had raped her had been sentenced to life in prison for the second time. Thompson spent the next decade in freedom marrying and having children while Cotton endured prison. Law Professor Richard Rosen of the University of North Carolina, troubled that a man had been sentenced to life based almost exclusively on eyewitness testimony, took on Cotton's case. DNA evidence that had not been previously available obtained conclusive results: Ronald Cotton had not raped Jennifer Thompson- Bobby Poole had. Cotton was released⁶ after serving more than a decade in prison for a crime he never committed.

*BCL (International), University College Cork.

¹ Phoebe Judge, 'After Innocence: Exoneration in America' <<http://www.thestory.org/stories/2013-06/jennifer-thompson>> accessed 3 March 2016.

² Sheena M Lorenza, 'Factors Affecting the Accuracy of Eyewitness Identification.' (2003) *The Review: A Journal of Undergraduate Student Research* 45-50 <<http://fisherpub.sjfc.edu/cgi/viewcontent.cgi?article=1013&context=ur>> date accessed 3 March 2016.

³ In January 1985, Cotton was convicted by a jury of one count of rape and one count of burglary. 'What Jennifer Saw' *Frontline* <<http://www.pbs.org/wgbh/pages/frontline/shows/dna/cotton/summary.html>> date accessed 3 March 2016.

⁴ The Innocence Project 'Ronald Cotton: Ten years imprisonment' <<http://www.innocenceproject.org/cases-false-imprisonment/ronald-cotton>> date accessed 3 March 2016.

⁵ Jennifer Thompson, 'I was certain, but I was wrong' *The New York Times Opinion* (New York, 18 June 2001) <<http://www.nytimes.com/2000/06/18/opinion/i-was-certain-but-i-was-wrong.html>> date accessed 3 March 2016.

⁶ The Innocence Project (n 4). On June 30th 1995 Cotton was officially cleared of all charges and released from prison. In July 1995 the Governor of North Carolina officially pardoned Cotton.

The Cotton case illustrates an increasingly recognised phenomenon - that mistaken eyewitness identification is a leading cause of wrongful convictions in the United States.⁷ Research has found that eyewitness errors are disturbingly common and yet difficult to recognise when they occur.⁸ While many in the criminal justice system acknowledge eyewitness fallibility, few understand the extent or the causes of the problem.⁹ To understand the impact of eyewitness error it is first necessary to consider the scope of the problem of wrongful convictions. The National Registry of Exonerations,¹⁰ maintained as a joint project between the University of Michigan Law School and the Centre for Wrongful Convictions at Northwestern University School of Law, lists 1,725 cases since 1989 in which a person was wrongly convicted but later exonerated by new evidence of innocence.¹¹ For all exonerations the most common causal factors are: perjury or false accusation (55%); false confession (13%); false or misleading forensic evidence (23%) and official misconduct (45%). The National Registry of Exonerations reports that mistaken identifications have been involved in approximately 35% of exoneration cases, 83% of robbery cases, and 73% of sexual assault cases. This remarkable rate of involvement of eyewitness errors in wrongful convictions is unfortunately no surprise.¹²

While there are numerous causes of wrongful conviction, it is proposed for the purposes of this paper to exclusively address the contribution of eyewitness errors to miscarriages of justice in the United States. It is imperative that we determine why mistaken eyewitness identifications occur and why they are so infrequently detected to prevent the kind of horrific injustice suffered, not only by Ronald Cotton, but of the remaining 1,724 individuals who have been wrongfully convicted since 1989.¹³ Accordingly, the aspiration of this paper is twofold. First, it is my endeavour to review the major developments in the experimental literature concerning the way that various factors relate to the accuracy of eyewitness identification. Second, I shall outline the flaws in the police-initiated identification procedures and the US Supreme Court's defective legal standard for the admissibility of the identifications generated by these procedures. To conclude I will provide a brief analysis of the consequences of wrongful convictions.

⁷ Innocence Project Video, 'Eyewitness Identification – Getting it Right' <<http://www.innocenceproject.org/causes-wrongful-conviction/eyewitness-misidentification>> date accessed 3 March 2016.

⁸ Deborah Davis and Elizabeth F Loftus, 'The Dangers of Eyewitnesses for the Innocent: Learning from the past and projecting into the age of social media' <<http://www.nesl.edu/userfiles/file/lawreview/Vol46/4/LoftusDavis%20-%20Final.pdf>> date accessed 5 March 2016.

⁹ The Justice Project, 'Eyewitness Identification: A policy review' <https://public.psych.iastate.edu/glwells/The_Justice%20Project_Eyewitness_Identification_%20A_Policy_Review.pdf> date accessed 5 March 2016.

¹⁰ The National Registry of Exonerations <<https://www.law.umich.edu/special/exoneration/Pages/browse.aspx>> date accessed 5 March 2016. The total number of exonerations is currently 1,745.

¹¹ The National Registry of Exonerations, 'The First 1,600 Exonerations' <https://www.law.umich.edu/special/exoneration/Documents/1600_Exonerations.pdf> date accessed 5 March 2016.

¹² Samuel R Gross and Michael Shaffer, 'Exonerations in the United States (1989-2012). Report by the National Registry of Exonerations' <https://www.law.umich.edu/special/exoneration/Documents/exonerations_us_1989_2012_full_report.pdf> date accessed 5 March 2016.

¹³ The National Registry of Exonerations (n 10).

B WHY DO EYEWITNESSES MAKE ERRORS?

Mistaken eyewitness identification is often attributed to the limited abilities of humans to process, permanently encode and accurately retrieve information, or the use of biased and unreliable procedures by which eyewitness testimony is gathered. Both Crowder¹⁴ and Loftus¹⁵ correctly hypothesised that memory is divided into three stages. First, there is the acquisition stage in which a memory enters a person's memory system. Second, there is the retention stage the period between the event and the eventual recollection of a particular piece of information. Third, there is the retrieval stage during which a person recalls stored information. Social science researchers have amassed a wealth of literature definitively proving that certain variables reduce an eyewitnesses' ability to make accurate identifications.¹⁶ In 1978, Gary Wells distinguished between two general types of factors relevant to the reliability of eyewitness testimony: system and estimator variables.¹⁷ System variables are those under the direct control of the criminal justice system. These include police protocols on instructing a witness before line-up identification, the composition of the line-up and how the suspects are presented to the witness. Estimator variables are those that affect the accuracy of eyewitness identifications but cannot be controlled by the criminal justice system. Estimator variables include physical influences such as lighting conditions, time of day, the weather at the time of the event or psychological influences such as the race of the witness or the suspect. Unfortunately, many estimator variables are inherent in the fallibility of human beings as eyewitnesses and cannot be corrected by police procedure. The advantage of system variables therefore, is that that they are susceptible to manipulation and can serve if carefully applied to decrease the opportunity for eyewitness identification error. In this paper, it is proposed to critically analyse both system and estimator variables with the intention of highlighting the causes of false perception and memory that unquestionably lead to an increase in wrongful convictions in the United States.

C EYEWITNESS VULNERABILITIES DURING MEMORY ACQUISITION/ENCODING

At the acquisition stage, information about an event is perceived by the witness. The event may last a few seconds or in some cases several hours. The acquisition stage or the individual's perception of the event is influenced by both 'event factors' and 'witness factors'. Event factors include the duration of the event, the presence or absence of violence, speed and distance involved, lighting conditions, disguises and distractions. Witness factors on the other hand include fear, stress, expectations, even age and gender. These factors are a few of many that affect the quality of information stored in memory. In the following section I shall address these factors and their corresponding impact on eyewitness identification.

¹⁴ Robert Crowder, *Principles of Learning and Memory: Experimental Psychology* (Hillsdale, New Jersey, Lawrence Erlbaum Associates 1976).

¹⁵ Elizabeth F Loftus 'Reconstructing Memory: The Incredible Eyewitness' (1974) 15 *Jurimetrics Journal* 188.

¹⁶ Gary L Wells and Elizabeth F Loftus, 'Eyewitness Memory for People and Events' in *Handbook of Psychology* <<https://webfiles.uci.edu/eloftus/WellsLoftus03.pdf>> date accessed 5 March 2016.

¹⁷ Gary L Wells, 'Applied Eyewitness Testimony Research: System Variables and Estimator Variables' (1978) 36(12) *Journal of Personality and Social Psychology* 1546.

1 Event Factors

i Exposure Time

Exposure time refers to the amount of time that the witness is able to view the perpetrators facial and physical characteristics. With more time witnesses are able to more effectively encode the perpetrators features thereby facilitating identification accuracy.¹⁸ In a study by Laughery, Alexander and Lane, 128 subjects were shown slides of people's faces for either ten seconds or thirty-two seconds.¹⁹ Participants then viewed another set of faces, some of which they had previously seen before. The results concluded that subjects who had viewed the photographs for a longer period of time were better able to recognise the faces they were asked to identify. Similarly, DiNardo and Rainey conducted a study where participants were required to view a group of photographs for either 1.5 or 5 seconds.²⁰ Participants were then presented with a mixture of old and new photographs. The results showed a definite advantage for photographs that had been studied for longer periods of time.²¹ A more recent study by Memon, Hope and Bull also found that increased exposure to an event increases the accuracy of the eyewitness report.²² Therefore, it seems reasonable to conclude that memory for faces should be improved with longer exposure durations. In reality however, the majority of victims view their aggressor or a perpetrator in unfavourable conditions and more often than not over a relatively short period of time.²³

ii Violence of the Event

It is often assumed that memories of violent or otherwise stressful events are so well encoded that they are largely indelible and that confidently retrieved memories are likely to be accurate.²⁴ However, findings from basic psychological research and neuroscience studies indicate that memory is a reconstructive process that is susceptible to distortion. Hollin and Clifford conducted a study on the effects of violence on eyewitness memory.²⁵ The subjects were shown a black and white videotape showing a female walking toward the camera. One group of subjects were shown a violent version of the video where a man carries out a brutal

¹⁸ Brian L Cutler and Margaret Bull Kovera, *Evaluating Eyewitness Identification* (New York, Oxford Press 2010).

¹⁹ Kenneth R Laughery, Judith F Alexander and Alan B Lane, 'Recognition of Human Faces: Effects of Target Exposure Time and Target Position' (1971) 55(5) *Journal of Applied Psychology* 477.

²⁰ Lisa DiNardo and David Rainey, 'The Effects of Illumination Level and Exposure Time on Facial Recognition' (1991) 41 *Psychological Record* 329.

²¹ Correct recognition of presented photos was 82.75% in the 5 second condition and 76.75% in the 1.5 second condition. False recognition of non-presented photos was 15.75% in the 5 second condition and 19.67% in the 1.5 second condition.

²² Amina Memon, Lorraine Hope and Ray Bull, 'Exposure Duration: Effects on Eyewitness Accuracy and Confidence' (2003) 94 *British Journal of Psychology* 339.

²³ Martin S Greenberg, David R Westcott and Scott E Bailey, 'When Believing is Seeing: The Effect of Scripts on Eyewitness Memory' (1998) 22 *Law and Human Behaviour* 685.

²⁴ Joyce W Lacy and Craig EL Stark, 'The Neuroscience of Memory: Implications for the Courtroom' (2013) 14(9) *Nature Reviews Neuroscience* 649.

²⁵ Clive R Hollin and Brian R Clifford, 'Effects of the Type of Incident and the Number of Perpetrators on Eyewitness Memory' (1981) 66(3) *Journal of Applied Psychology* 364.

assault on the woman. In the non-violent version, the male approaches the female and simply asks for directions. After viewing the tape the subjects were asked to recall the incident and to identify the male from a set of photographs. The results showed that accuracy of testimony was consistently poorer in the violent conditions. Similarly, Loftus and Burns carried out three experiments where subjects were shown a short film of a mentally shocking event in which a young boy is violently shot in the face.²⁶ Compared to those who saw a non-violent version of the same film, the subjects who saw the mentally shocking version showed poorer retention of the details. The results confirm that mentally shocking episodes may disrupt the lingering processing necessary for full storage of information in memory. While violence and trauma tend to improve memory for the central gist of an event, it incontrovertibly impairs memory of the peripheral details.

iii Distance

Environmental factors such as the distance of the eyewitness to the perpetrator affect the conditions of visibility and determine what an eyewitness may or may not have reliably witnessed. Lindsay, Semmler, Weber and Brewer conducted a study to analyse how variations in distance can affect eyewitness reports and eyewitness accuracy.²⁷ Over 1,300 participants were approached during normal daily activities and were asked to observe a target person at one of a number of possible distances. Under a perception immediate memory or delayed memory condition, witnesses provided a brief description and estimated the distance from the target and then examined a six person target-present or target absent line-up to see if they could identify the person. The results showed that errors in distance judgments were often substantial. Interestingly, description accuracy did not vary systematically with distance; the opposite was true for decision accuracy. Similarly, identification choosing rates were not affected by distance.

iv Illumination

Light levels and obscured illumination have been studied by eyewitness researchers and have been shown to influence perceptual identification processes.²⁸ Sudden changes to the overall level and direction of illumination are likely to influence the ability of the eyewitness to identify a perpetrator. If a face is illuminated from one direction during the witnessed event and lit from a different direction during the line-up or photo spread, it may be difficult for the witness to match the target to the representation of the perpetrator stored in memory. In a study conducted by Braje, Kersten, Tarr and Troje participants were required to make same/different judgments for pairs of faces presented sequentially.²⁹ The faces in the photographs were either illuminated in the same direction or from different directions. The

²⁶ Elizabeth F Loftus and Terrence E Burns 'Mental Shock Can Produce Retrograde Amnesia' (1982) 10(4) *Memory and Cognition* 318.

²⁷ Roderick C Lindsay, Carolyn Semmler, Nathan Weber, Neil Brewer and Marilyn R Lindsay, 'How Variations in Distance Affect Eyewitness Reports and Identification Accuracy' (2008) 32 *Law and Human Behaviour* 526.

²⁸ Colin G Tredoux, Christian A Meissner and Roy S Malpass, 'Eyewitness Identification' in Charles Spielberger (ed), *Encyclopedia of Applied Psychology* (Oxford, Boston, Elsevier Academic Press 2004).

²⁹ Wendy J Braje, 'Illumination Encoding in Face Recognition: Effect of Position Shift' (2003) 3(2) *Journal of Vision* 3(2) 161.

results showed that recognition performances declined when faces were lit from different directions. Similarly, in a study conducted by DiNardo and Rainey,³⁰ participants were shown ten photographs for three seconds a piece in either dim or bright lighting conditions. The participants were then tested with forty photographs for an old/new recognition test under the same lighting conditions. The results proved that recognition performance was better when bright lighting was used. These situations all support the general contention that degree of illumination sets hard limits on the recognition accuracy of eyewitnesses.

v Disguises/Distractions

Disguises are frequently used during the commission of a crime and their presence can significantly impair the encoding of the perpetrators face. In a study carried out by Cutler, Penrod and Martens 165 college students were shown a videotaped crime enactment.³¹ In half of the videotapes the perpetrator wore a cap that covered his hair and hairline and in the other half, the perpetrator wore no hat. All witnesses later attempted to identify the perpetrator from a line-up. Of the witnesses who viewed the perpetrator without the cap 45% made a correct decision on the line-up test, as compared to 27% of the witnesses who viewed the perpetrator whose hair and hairline were covered. Therefore, research supports the contention that the upper portions of the face provide the most important information for later identification, and disguises that hinder the encoding of these parts of the face are more likely to prevent identification of the perpetrator. Other research shows that changes in glasses, hairstyle, hair colour, facial hair and age related changes can also impair identification accuracy.³² Other facial attributes such as attractiveness or facial typicality have also been shown to increase the sense that a face has been seen before resulting in an increase in the rate of false identifications.³³

vi Weapon Focus

The presence of a weapon has also been shown to divert a witnesses' attention away from the face of the offender. The presence of a weapon reduces both the subsequent quality of the description provided by the witness and his or her attempts at perceptual identification of the perpetrator.³⁴ This phenomenon is known as the 'weapon focus effect.'³⁵ In a study carried out by O'Rourke, Cutler, Penrod and Stuve 120 community members viewed a videotape crime enactment in which a weapon was either present or absent.³⁶ One week later each

³⁰ Lisa DiNardo and David Rainey, 'Recognizing Faces in Bright and Dim Light.' (1989) 3(1) *Perceptual and Motor Skills* 836.

³¹ Brian L Cutler, Steven D Penrod and Todd K Martens, 'Improving the Reliability of Eyewitness Identification: Putting Context into Context' (1987) 72(4) *Journal of Applied Psychology* 629.

³² John D Read, Patricia Tollestrup, Richard Hammersley, E McFadzen and Albert Christensen, 'The Unconscious Transference Effect: Are Innocent Bystanders Ever Misidentified?' (1990) 4(1) *Applied Cognitive Psychology* 3.

³³ Tredoux, Meissner and Malpass (n 28).

³⁴ *ibid.*

³⁵ Elizabeth F Loftus, Geoffrey R Loftus and Jane Messo, 'Some Facts About Weapon Focus.' (1987) 11(1) *Law and Human Behaviour* 55.

³⁶ Thomas E O'Rourke, Steven D Penrod, Brian L Cutler and Thomas E Stuve, 'The External Validity of Eyewitness Identification Research: Generalizing Across Subject Populations' (1989) 13(4) *Law and Human Behavior* 385.

eyewitness was shown either a perpetrator-present or perpetrator-absent videotaped line-up. The weapon concealed group showed a correct identification rate of 55% whereas the weapon present group showed a correct identification rate of 37%. Similarly, in a study carried out by Loftus, Loftus and Messo subjects who viewed a simulated armed robbery of a bank spent more time looking at the weapon than control subjects who saw a virtually identical scene involving a bank cheque.³⁷ As a result, the participants who saw the perpetrator carrying a weapon had a reduced ability to make a correct identification. In a second study, subjects who saw the event containing a weapon were not only less likely than controls to accurately identify the perpetrator, but they were less accurate when they answered specific questions about the perpetrator. Research highlights therefore that ‘weapon focus’ draws attentional focus away not only from the characteristics of the perpetrator but of other features of the witnessed event. In a real life crime situation ‘weapon focus’ would presumably be inextricably interwoven with high arousal caused by the crime itself and intensified by the presence of a weapon. Maass and Köhnken discovered that the presence of a syringe in a stage crime reduced line-up recognition for eyewitnesses.³⁸ It is reasonably concluded therefore that high stress induced by the presence of a weapon could be expected to narrow the eyewitnesses’ range of perceptual focus, thereby exacerbating the potential for a mistaken identification.

2 Witness Factors

i Stress of Witness

The effects of stress on memory and cognition are multifaceted, diverse and complex. A witnesses’ attention may be impaired or distracted if he or she focuses on the psychological stress or fear accompanying a criminal or otherwise traumatic event. Even if a witness tries to be attentive, high fear or stress may hinder the accuracy of subsequent identifications. Contrary to common wisdom, the human fight or flight physiological response to threat is geared toward enhancing prospects of survival not memory.³⁹ Steblay notes that ‘while the gist of the frightening experience is not easily forgotten, details are often not encoded correctly, if at all.’⁴⁰ Deffenbacher, Bornstein, Penrod and McGorty note that stress negatively affects eyewitness identification in areas including perpetrator characteristics, crime scene details and actions of central characters.⁴¹ Morgan, Southwick, Steffian, Hazlett and Loftus conducted an experiment on the impact of stress and misinformation on memory.

³⁷ Loftus, Loftus and Messo (n 35).

³⁸ Anne Maass and Günther Köhnken, ‘Eyewitness Identification: Simulating the “Weapon Effect”’ (1989) 13(4) *Law and Human Behavior* 397.

³⁹ Nancy K Steblay, ‘Scientific Advances in Eyewitness Identification Evidence’ (2015) 41(3) *William Mitchell Law Review* 1090.

⁴⁰ *ibid* 1105.

⁴¹ Kenneth A Deffenbacher, Brian H Bornstein, Steven D Penrod and E Kiernan McGorty, ‘A Meta-Analytic Review of the Effects of High Stress on Eyewitness Memory.’ (2004) 28(6) *Law and Human Behavior* 687.

⁴² They tested 540 active-duty military personnel who were enrolled in military survival school training by placing them in situations of either high-stress or low-stress interrogation. The personnel went through food and sleep deprivation for forty-eight hours and they were shown both live and photo line-ups of their interrogators. Misinformation introduced after the negatively affected memory for the details of the event significantly affected the accuracy of identification of an aggressive interrogator. The high-stress subjects performed much worse in the photo line-ups and over two-thirds of them made an incorrect identification. In the live line-up, 56% of the high-stress subjects made an incorrect identification. These findings demonstrate that memories for stressful events are highly vulnerable to modification by exposure to misinformation, even in individuals whose level of training and expertise might be thought to render them relatively immune to such influences.

ii Age

One question increasingly studied is the extent to which the witnesses' age affects eyewitness ability. Bornstein asserts that the vast majority of psychological research seems to indicate that young children make less accurate eyewitnesses than young adults do whereas elderly individuals may or may not be less able than young adults.⁴³ Studies have shown that children demonstrate a limited ability to recall information and show lower accuracy in the identification of faces. They also have a proclivity toward choosing or guessing during a line-up identification task leading to an increased likelihood of mistaken identification of an innocent person.⁴⁴ Although children tend to recall less information when compared with adults, the overall proportion of correct information recalled does not typically differ. Older adults also become somewhat variable, but in the absence of a disease process they are indistinguishable on average from younger adults. Brigham and Williamson⁴⁵ conducting research in this area showed photographs of faces of black and white individuals to subjects of both races who averaged 72 years in age. Later they were asked to identify the original photographs in a yes/no recognition test. The overall level of recognition accuracy of these elderly people was marginally lower than for college age subjects who viewed the same slides in an earlier study.⁴⁶ Valerie, Pickering and Darling⁴⁷ concluded that witnesses under 30 were most accurate at identifying suspects. It is submitted that although the cross-sectional studies comparing young adults might typically show age-related decrements, it is a mistake to assume that the elderly will invariably make poorer eyewitnesses.

⁴² Charles A Morgan, Steven Southwick, George Steffian, Gary A Hazlett and Elizabeth F Loftus, 'Misinformation Can Influence Memory for Recently Experienced, Highly Stressful Events' (2013) 36 *International Journal of Law and Psychology* 11.

⁴³ Brian H Bornstein, 'Memory Processes in Elderly Eyewitnesses: What We Know and What We Don't Know' (1995) 13 *Behavioral Sciences and the Law* 337.

⁴⁴ Brian R Clifford and Jane Scott, 'Individual and Situational Factors in Eyewitness Testimony' (1978) 63(3) *Journal of Applied Psychology* 352.

⁴⁵ John C Brigham and Norma L Williamson, 'Cross-racial recognition and Age: When You're Over 60, Do They Still "All Look Alike?"' (1979) 5(2) *Personality and Social Psychology Bulletin* 218.

⁴⁶ Brian H Bornstein, Christy J Witt, Katie E Cherry and Edith Greene, 'The Suggestibility of Older Witnesses' (2000) University of Nebraska-Lincoln, Faculty Publications Department of Psychology, Paper 168.

⁴⁷ Tim Valentine, Alan Pickering and S Darling, 'Characteristics of Eyewitness Identification that Predict the Outcome of Real Lineups' (2003) 17 *Applied Cognitive Psychology* 969.

iii Sex of the Witness and Own-Race Bias

Own-race bias is described as the belief that humans can more easily recall a face of their own sex than that of the opposite sex.⁴⁸ Shapiro and Penrod⁴⁹ in an extensive meta-analysis of own race bias discovered that generally females were somewhat more likely to make accurate identifications but also made false identifications more often than men. Clifford and Scott⁵⁰ also found that men were more accurate than women in their identification when the target was part of a violent scenario. However, when the scenario was non-violent there showed no sex difference. Nevertheless, studies show females are superior under particular circumstances. Yarmey and Kent found females to be more accurate than males in identifying a female bystander but not in identifying a male aggressor in a crime scene.⁵¹ Further studies conducted in this area by Powers, Andriks and Loftus found that when dealing with female orientated details, females were both more accurate eyewitnesses and more resilient to misleading questions when dealing with male-oriented details.⁵²

iv Cross-Racial Misidentification

Research has shown that when the race of the perpetrator and the witness are different the interaction can impair identification accuracy. Cross-racial misidentification is a phenomenon where people have difficulty identifying members of a different racial group.⁵³ A meta-analysis of studies spanning thirty years and encompassing the laboratory experiences of nearly 5,000 research participants found that eyewitnesses were 1.4 times more likely to correctly identify a previously seen face of their own race compared to a face of another race, and 1.56 times more likely to falsely identify a different race face never seen before.⁵⁴ In other words, studies of the cross-race effect have shown that memory for same-race faces are generally superior to memory for faces of another less familiar race. The most widely cited study on cross-racial misidentification is that of Malpass and Kravitz.⁵⁵ These investigators used participants from the University of Illinois, a predominantly white university, and Howard University, a predominantly black university. The participants were presented with photographs of forty black and forty white males of college age. After viewing, the participants were shown the entire set of eighty faces randomly ordered and were asked to indicate which they had seen before. Subjects recognised faces of their own race better than

⁴⁸ 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.

⁴⁹ Peter N Shapiro and Steven Penrod, 'Meta-Analysis of Facial Identification Studies' (1986) 100 *Psychological Bulletin* 139.

⁵⁰ Brian R Clifford and Jane Scott, 'Individual and Situational Factors in Eyewitness Testimony' (1978) 63 *Journal of Applied Psychology* 352.

⁵¹ Daniel A Yarmey and Judy Kent, 'Eyewitness Identification by Elderly and Young Adults' (1980) 4(4) *Law and Human Behavior* 359.

⁵² Peter A Powers, Joyce L Andriks and Elizabeth F Loftus, 'Eyewitness Accounts of Females and Males' (1979) 64(3) *Journal of Applied Psychology* 339.

⁵³ John P Rutledge, 'They All Look Alike: The Inaccuracy of Cross-Racial Identifications' (2001) 28 *American Journal of Criminal Law* 207.

⁵⁴ Meissner and Brigham (n 48).

⁵⁵ Ray Malpass and Jerome Kravitz, 'Recognition for Faces of Own and Other Race' (1969) 13 *Personality and Social Psychology* 330.

faces of the other race.⁵⁶ A similar experiment carried out by Shepherd, Deregowski and Ellis showed a set of white and black faces to white and black subjects from Scotland and Rhodesia.⁵⁷ All subjects were later required to identify the original faces when they were mixed in with other faces. Unsurprisingly, the white participants from Scotland were superior at recognising white rather than black faces, while for the Black Rhodesian participants, the reverse was true.

v Cross-Race Bias

The cross-race effect is of most significance to the criminal justice system when individuals mistakenly identify a suspect who is not the perpetrator. Racial bias can also impact an eyewitness' ability to correctly identify the assailant. Studies have also shown that African-American faces and bodies can trigger thoughts of crime and thinking of crime can trigger thoughts of African-American people.⁵⁸ Shooter bias studies explore the impact of implicit race bias on a person's decision to shoot.⁵⁹ More than twenty studies reveal that both white and African-American subjects are more likely to shoot an unarmed African-American man than an unarmed white man.⁶⁰ This shooter bias goes beyond negative sentiments and shows the unconscious impact of racial stereotypes.⁶¹ One of the most popularly known studies on implicit bias and eyewitness identification involves a photograph of two men fighting – one man held a knife while the other was unarmed.⁶² When both men in the photograph were Caucasian, subjects generally remembered correctly which man was holding the knife.⁶³ When the Caucasian man was armed and the African-American man was unarmed the majority of subjects, both African-American and Caucasian, misremembered the African-American man as holding the knife. Studies similarly find that people are more likely to misidentify objects as guns when in the hands of African-American men instead of Caucasian men.⁶⁴

D EYEWITNESS MEMORY VULNERABILITIES DURING RETENTION/STORAGE

⁵⁶ The white subjects from Howard University made an average of 2.14 false identifications when attempting to identify a white face but they made an average of 5.86 false identifications when attempting to identify black faces.

⁵⁷ John W Shepherd, Jan B Deregowski and Hadyn D Ellis, 'A Cross-Cultural Study of Recognition Memory for Face' (1974) 9(3) *International Journal of Psychology* 205.

⁵⁸ Jennifer L Eberhardt, Phillip A Goff, Valerie J Purdie and Paul G Davies, 'Seeing Black: Race, Crime and Visual Processing' (2004) 87(6) *Journal of Personality and Social Psychology* 876.

⁵⁹ Adam Benforado, 'Quick on the Draw: Implicit Bias and the Second Amendment' (2010) 89 *Oregon Law Review* 43, 46-47.

⁶⁰ Jerry Kang, 'Trojan Horses of Race' (2005) 118 *Harvard Law Review* 1489, 1514-28.

⁶¹ Joshua Correll, 'The Police Officer's Dilemma: Using Ethnicity to Disambiguate Potentially Threatening Individuals' (2002) 83 *Journal of Personality and Social Psychology* 1314, 1324-25.

⁶² Eberhardt (n 58).

⁶³ Keith Payne, 'Prejudice and Perception: The Role of Automatic and Controlled Processes in Misperceiving a Weapon' (2001) 81 *Journal of Personality and Social Psychology* 181.

⁶⁴ Eberhardt (n 58).

Memory storage refers to the long-term retention of information after the encoding/acquisition phase. Studies report little loss of memory over the course of a day or even a week; however, the more typical result is a decline in accuracy as the retention interval is lengthened.⁶⁵ In a study conducted by Lipton the results showed that those who viewed an armed robbery and were interviewed about the shooting a week later were substantially less accurate than participants who were tested immediately.⁶⁶ Similarly, a study carried out by Ellis, Shepherd and Davies⁶⁷ found that verbal descriptions of human faces were adversely affected by long intervals of time.⁶⁸ This research generally supports Ebbinghaus'⁶⁹ original research in showing that the longer the interval between the event and the subsequent identification the more poorly eyewitnesses perform. This research provides an unsettling reality- given the extensive workload of many United States Police Departments, witnesses are not always asked to identify a suspect as promptly as the justice system would require. This may result in the unfortunate consequence of wrongfully convicting an innocent man or woman. What is important to note about the retention interval is not only the mere passage of time, but what goes on during the interval.

Misleading Post-Event Information

The longer the retention interval, the more vulnerable the eyewitness memory is to 'post-event contamination' or 'post-event information'. Post-event information is information that is learned after an event takes place that is then integrated into the memory of the event.⁷⁰ After the new information is incorporated into the eyewitness' memory, it generally is not possible to separate information which came from the event itself from subsequent information which was learned and became integrated later on.⁷¹ To the degree that the post-event information is false, this results in the ultimate memory becoming more inaccurate.⁷² Examples of post-event information include leading questions, overhearing other witnesses talking about the event or engaging in conversation with other witnesses, and reading or viewing the event from numerous sources. The effect of misleading post-event information on eyewitness testimony was first demonstrated by Loftus et al and has been studied extensively ever since.⁷³ Loftus and her colleagues showed participants a set of slides of events leading up to a car accident. One group was shown a red Datsun stopping at a junction with a 'STOP' sign, while the other group was shown a 'Yield sign'. Half of each group was

⁶⁵ J Kirkland Reynolds and Kathy Pezdek, 'Face Recognition Memory: The Effects of Exposure Duration and Encoding Instruction' (1992) 6 *Applied Cognitive Psychology* 279.

⁶⁶ Jack P Lipton, 'On the Psychology of Eyewitness Testimony' (1977) 66 *Journal of Applied Psychology* 78.

⁶⁷ Graham Davies, Hadyn Ellis and John Shepherd, *Perceiving and Remembering Faces* (London, Academic Press 1981) 9.

⁶⁸ After a week's delay, descriptions for faces were briefer and less likely to lead to accurate identification than those made immediately or soon afterward.

⁶⁹ Hermann Ebbinghaus, 'Memory' (New York: Dover 1964) (Original work published 1885).

⁷⁰ M McCloskey and M Zaragoza, 'Post-Event Information and Memory: Reply to Loftus, Schooler and Wagner' (1985) 114(3) *Journal of Experimental Psychology: General* 381.

⁷¹ Stephen Lindsay and Marcia Johnson, 'Recognition Memory and Source Monitoring' (1991) 29(3) *Bulletin of the Psychonomic Society* 203.

⁷² Uta Jaschinski and Dirk Wentura, 'Misleading Post-Event Information and Working Memory Capacity: An Individual Approach to Eyewitness Memory' (2002) 16 *Applied Cognitive Psychology* 223.

⁷³ Elizabeth Loftus, David B Miller and Helen J Burns, 'Semantic Integration of Verbal of Information into a Visual Memory' 4 *Journal of Experimental Psychology: Human Learning and Memory* 19.

asked whether another car passed the red Datsun while it was at the Yield sign, and the other half were asked the same question with relation to the 'STOP' sign. Finally, they were shown pairs of slides and had to identify which slides were in the original sequence. 75% of participants who had consistent questions picked the correct slide, whereas only 41% who had a misleading question picked the correct slide. These results demonstrate that misleading questions undoubtedly affect the ability of eyewitness recall. Subsequent studies showed that misleading post-event questions could also cause a variety of other distortions in eyewitness reports.⁷⁴ In another experiment carried out by Loftus participants were shown a series of slides depicting an auto-pedestrian accident in which a green car drives by the scene.⁷⁵ A misled group of participants received a question suggesting that the passing car was blue while the control group did not receive colour misinformation. When tested later many of the participants who had received the misleading information misremembered the colour of the passing car in a way that was aligned with the misinformation. Other studies have shown that participants could also be led to report entire objects that were not present in the originally witnessed event. In Loftus, participants who were asked 'how fast was the white sports car going when it passed the barn while travelling along the country road?' were much more likely to later claim that they had seen the non-existent barn than were control participants who had not been misled.⁷⁶ Results have shown that misleading post-event information can not only supplement eyewitness memories, it can transform them.⁷⁷ Demonstrations of the surprising ease with which people could be led to report objects and events they had not seen continues to challenge prevailing views about the validity of memory and raises serious concerns about the reliability of eyewitness identification. These experiments only serve to emphasise the extent to which remembering is a complex reconstructive process and not a literal record of an actual event.⁷⁸

E EYEWITNESS MEMORY VULNERABILITIES DURING MEMORY RETRIEVAL

Stebly aptly submits that

[E]yewitness memory is not like a playback system that can be accessed for a clean full version of a past event. Information encoded into memory at the time of a crime is

⁷⁴ Kathryn Braun and Elizabeth F Loftus, 'Advertisings Misinformation Effect' (1998) 12 Applied Cognitive Psychology 569.

⁷⁵ Elizabeth F Loftus, Maria Z Salzberg, Robert B Burns and Kristie P Sanders, 'Destruction of Visual Memory by Verbal Information' (Annual Meeting of the Psychonomic Society, Denver, November 1975)

⁷⁶ Elizabeth F Loftus, 'Leading Questions and the Eyewitness Report' (1975) 7 Cognitive Psychology 560.

⁷⁷ Maria S Zaragoza, Robert F Belli and Kristie E Payment, 'Misinformation Effects and the Suggestibility of Eyewitness Memory' in Maryanne Garry and Harlene Hayne (eds) *Do Justice and Let the Sky Fall: Elizabeth F Loftus and Her Contributions to Science, Law and Academic Freedom* (Hillsdale, New Jersey, Lawrence Erlbaum Associates 2006)

<<http://www.personal.kent.edu/~mzaragoz/publications/Zaragoza%20chapter%204%20Garry%20Hayne.pdf>>

date accessed 6 March 2016.

⁷⁸ *ibid.*

not stored in pristine or immutable condition but is instead quite vulnerable to revision.⁷⁹

Retrieval- the final stage of memory- involves recalling and reconstructing an event. Typical retrieval situations for witnesses include reporting to the police, viewing line-ups, recounting experiences to friends and mental health professionals and testifying in court. Line-ups in particular have not been considered fair in practice given the innumerable amount of individuals who have been wrongfully convicted on the basis of eyewitness identification from a line-up.⁸⁰ Many of these misidentifications could have been prevented, many wrongful convictions averted and many additional crimes avoided if police had used more reliable line-up procedures. In the following section, I propose to examine the impact of line-up instructions, the construction of a line-up, the opposing views regarding administrator knowledge, and the method of presentation of targets, on eyewitness identification accuracy.

1 Line-Up Instructions

Prior to viewing a line-up, the line-up administrator may provide the eyewitness with a warning or a set of instructions as to how the process will be carried out. Research has shown that if the instructions provided by the line-up administrator are biased the witnesses identification accuracy can suffer. Biased instructions suggest to the eyewitness that the perpetrator is in the line-up or otherwise discourage rejections of the line-up by failing to provide a no-choice option.⁸¹ As a result, a line-up administrator providing biased instructions may encourage an eyewitness to make an identification- even when the perpetrator is not present in the line-up. In Steblay's meta-analysis of studies on line-up instructions, witnesses who were exposed to biased instructions (featuring leading and/or pressure instructions) were more likely to make a false identification than those who received unbiased instructions.⁸² However when the perpetrator was in the line-up receiving biased versus unbiased instructions had no impact on correct identifications. An incorrect identification made by an eyewitness as a result of biased instructions from a line-up administrator may have a catastrophic domino effect potentially resulting in the conviction of an innocent man or woman. Given the risk for false identifications and a subsequent wrongful conviction, the US Department of Justice Guidelines for Law Enforcement recommend the use of unbiased instructions.⁸³ Unbiased instructions would inform the eyewitness that the perpetrator may or may not be in the line-up.

⁷⁹ Steblay (n 39).

⁸⁰ Tredoux et al (n 28).

⁸¹ Nancy K Steblay, 'Social Influence in Eyewitness Recall: A Meta-Analytic Review of Lineup Instruction Effects' (1997) 21(3) *Law and Human Behavior* 283.

⁸² *ibid.*

⁸³ US Department of Justice, 'Eyewitness Evidence – A Guide for Law Enforcement' <<https://www.ncjrs.gov/pdffiles1/nij/178240.pdf>> date accessed 6 March 2016.

2 Filler Selection

A critical component of a line-up construction is deciding who else to place in the line-up with the suspect. These individuals are called fillers, foils or distracters.⁸⁴ Luus and Wells have suggested that the inclusion of fillers serves several important purposes.⁸⁵ As fillers are known to be innocent, an eyewitness selection thereof is a known error and can serve as a measure of their credibility. Furthermore, fillers ensures that the witness relies on his or her memory for the perpetrator rather than deduction or guessing. In a poorly constructed line-up in which the suspect has an identifying characteristic that is not shared by fillers- the witness can easily deduce the identity of the suspect. Similarly a line-up that contains only suspects (no fillers) is like a multiple-choice test with no wrong answer. In an all-suspect line-up, charges may be brought against anyone with whom the witness identifies. Although fundamental and seemingly elementary, this safeguard against mistaken identification is commonly violated. The Duke University Lacrosse team rape case that came to attention in 2006 serves as a prime example.⁸⁶ The witness who described the multiple offenders as lacrosse team members was shown a series of line-ups with all team members and no fillers, including one display with all forty-six lacrosse players. In short, the procedures used were non-diagnostic for the guilt or innocence of the young men in the line-up.⁸⁷

3 Single-Blind versus Double-Blind Administration

Often the line-up administrator- who may be charged with constructing the line-up, providing unbiased instructions to witnesses, asking questions and recording witness decisions- may also be a police officer who is closely involved in the investigation. This is of particular concern, as a line-up administrator who knows the location of the suspect in the line-up might advertently influence the witness to make an identification. Research has shown that contact between witnesses and a knowledgeable administrator increases false identifications.⁸⁸ Greathouse and Koveras' research confirmed that knowledgeable administrators do reveal subtle cues to witnesses.⁸⁹ Most worryingly however is that this influence is not detectable by jurors.⁹⁰ This may precipitate a dangerous chain of events, potentially resulting in the conviction of an entirely innocent person. The most efficient safeguard therefore, is the use of blind line-ups. A blind line-up is a safety procedure in which the administrator does not know which member of the line-up is the suspect. This recommendation has not been met with universal acceptance within law enforcement groups because it conflicts with well-

⁸⁴ Annie-May Leach, Brian Cutler and Lori van Wallendael, 'Lineups and Eyewitness Identification.' (2009) 5 Annual Review of Law and Social Science 157.

⁸⁵ Elizabeth Luus and Gary Wells, 'Eyewitness Identification and the Selection of Distracters for Lineups' (1991) 15(1) Law and Human Behavior 43.

⁸⁶ Duke Lacrosse Rape Case <<http://today.duke.edu/showcase/lacrosseincident/>> date accessed 6 March 2016.

⁸⁷ LuLu Chang, 'The Duke Lacrosse Rape Scandal Was 8 Years Ago, So Where are the Accused Now?' Bustle (May 29, 2014) <<http://www.bustle.com/articles/26053-the-duke-lacrosse-rape-scandal-was-8-years-ago-so-where-are-the-accused-now>> date accessed 6 March 2016.

⁸⁸ Ryann M Haw and Ronald P Fisher, 'Effects of Administrator-Witness Contact on Eyewitness Identification Accuracy' (2004) 89(6) Journal of Applied Psychology 1106.

⁸⁹ Sarah Greathouse and Margaret Kovera, 'Instruction Bias and Lineup Presentation Moderate the Effects of Administrator Knowledge on Eyewitness Identification' (2009) 33(1) Law and Human Behavior 70.

⁹⁰ Lynn Garrioch and Elizabeth Brimacombe, 'Lineup Administrator's Expectations: Their Impact on Eyewitness Confidence' (2001) 25 Law and Human Behavior 299.

established investigatory procedures and suggests a lack of trust among police and prosecutors.⁹¹ Not only is an innocent suspect in danger during the course of a line-up but also in the aftermath where a line-up administrator provides confirmatory feedback.

4 Post-Identification Feedback

Post-identification feedback is any statement that the line-up administrator makes after the witness identifies the suspect.⁹² Confirmatory feedback given to the eyewitness can either be explicit or expressed in more subtle ways. A meta-analysis carried out by Douglass and Steblay revealed that witnesses who received confirmatory feedback expressed more confidence in their identifications, better witnessing conditions, stronger identification performance and better memories.⁹³ Most disconcertingly, eyewitness who receive feedback also appear more credible to mock jurors.⁹⁴ The confidence of an eyewitness should be based on memory alone not on feedback from the investigators. US Department of Justice Guidelines suggest that witness confidence statements should be obtained before any feedback is provided.⁹⁵ Research has found that this procedure protects witnesses from many of the reported feedback effects.⁹⁶

5 Simultaneous versus Sequential Line-Up Presentation

The most frequently used line-up presentations are simultaneous and sequential line-ups. In a simultaneous line-up, all of the line-up members are presented at the same time. Wells theorised that simultaneous line-ups may encourage witnesses to make relative judgments because all line-up members are shown at the same time.⁹⁷ Through a process of elimination the witness can compare the line-up members to each other to determine which one most resembles his or her memory of the perpetrator. The issue that often arises is that one of the line-up members will look most like the perpetrator. If the perpetrator is not in the line-up, the witness may still be inclined to choose the individual who most resembles his or her memory of the perpetrator resulting in a false identification and potentially a miscarriage of justice.

Research by Wells found that when the perpetrator was removed from the simultaneous line-up without replacement, witnesses were more likely to choose a filler- the next best match.⁹⁸ In a sequential line-up a witness views one line-up member at a time and makes an

⁹¹ Gary L Wells, Roy S Malpass, Roderick CL Lindsay, Ronald Fisher, John W Turtle and Solomon L Fulero, 'From the Lab to the Police Station: A Successful Application of Eyewitness Research' (2000) 55 *American Psychologist* 81.

⁹² Gary L Wells and Amy L Bradfield, "'Good, You Identified the Suspect: Feedback to Eyewitnesses Distorts their Reports of the Witnessing Experience' (1998) 83(3) *Journal of Applied Psychology* 360.

⁹³ Amy Bradfield Douglass and Nancy K Steblay, 'Memory Distortion in Eyewitnesses: A Meta-Analysis of the Post-Identification Feedback Effect' (2006) 20(7) *Applied Cognitive Psychology* 859.

⁹⁴ Elizabeth Luus and Gary L Wells, 'The Malleability of Eyewitness Confidence: Co-Witness and Perseverance Effects' (1994) 79(5) *Journal of Applied Psychology* 714.

⁹⁵ US Department of Justice (n 83).

⁹⁶ Wells and Bradfield (n 92).

⁹⁷ Gary L Wells and John W Turtle, 'Eyewitness Identification: The Importance of Lineup Models' (1986) 99 *Psychological Bulletin* 320.

⁹⁸ Gary L Wells, 'The Psychology of Lineup Identifications' (1984) 14(2) *Journal of Applied Social Psychology* 89.

identification in a 'yes/no' fashion for each of the members as they are presented. The sequential line-up was designed to reduce witnesses' ability to rely upon a relative judgment.⁹⁹ Rather than comparing line-up members to each other the witness is forced to match each line-up member in isolation to his or her memory of the perpetrator. Research has found that simultaneous line-ups are marginally advantageous to sequential line-ups, in that participants were more likely to correctly identify the perpetrator (50% versus 35%), less likely to falsely reject the line-up and indicate that the perpetrator was not there (26% simultaneous versus 46% sequential).¹⁰⁰ Although the results appear to indicate that when a perpetrator is present simultaneous line-ups are slightly preferable, when the perpetrator is absent the results are significantly different and tell a very different story. Participants were far more likely to choose someone from a simultaneous line-up (51%) than a sequential line-up (28%) when the perpetrator was not present. Although US Justice Department Guidelines stop short of explicitly recommending one line-up procedure over another, police agencies could change their practice based on the guidelines assertion that sequential line-ups produce higher accuracy rates (56% versus 48%).¹⁰¹

6 Repeated Procedures

An issue of great concern is the eyewitness who fails to identify the suspect in a line-up or does so only tentatively, and later is shown another line-up as a second chance to identify the suspect.¹⁰² It is submitted that the practice of conducting multiple identification procedures with the same witness and the same suspect should be avoided because of the inherent suggestiveness and the potential to contaminate a witness memory. An eyewitness who views a line-up for a second time with the same suspect may erroneously presume that the police believe the suspect to be the perpetrator. An eyewitness may become confused and identify the suspect based on recognising him/her from the prior procedure rather than from remembering the suspect's presence at the crime. The Fuller case is a prime example of what can go wrong. The victim in the case initially told police that she could not provide a detailed description of her attacker nor could she pick him from the first line-up. She later selected him from a second photo line-up; Fuller was the only person present in both line-ups. He would spend twenty-five years in a Texas prison for a crime he did not commit, until DNA evidence exonerated him in 2006.¹⁰³ Research by Deffenbacher, Bornstein and Penrod revealed that an eyewitness' exposure to a suspect during examination of mug shots prior to

⁹⁹ Roderick CL Lindsay and Gary L Wells, 'Improving Eyewitness Identifications from Lineups: Simultaneous versus Sequential Lineup Presentation' (1985) 70(3) *Journal of Applied Psychology* 556.

¹⁰⁰ Gary L Wells, Nancy K Steblay and Jennifer E Dysart, 'A Test of the Simultaneous versus Sequential Lineup Methods: An Initial Report of the AJS National Eyewitness Identification Field Studies' <<http://www.popcenter.org/library/reading/PDFs/lineupmethods.pdf>> date accessed 6 March 2016.

¹⁰¹ US Department of Justice (n 83).

¹⁰² Nancy K Steblay, 'Reduction of False Convictions Through Improved Identification Procedures: Further Refinements for Street Practice and Public Policy' <<https://www.ncjrs.gov/pdffiles1/nij/grants/249006.pdf>> date accessed 6 March 2016.

¹⁰³ Larry Fuller, '26 Years in Prison: Innocent' Innocence Project <<http://www.innocenceproject.org/cases-false-imprisonment/larry-fuller>> date accessed 6 March 2016.

the photo line-up can result in decreased identification accuracy.¹⁰⁴ In particular, an increased probability exists that the eyewitness will choose the line-up member whose mug shot the eyewitness previously viewed when the real culprit is absent from the line-up. Despite the obvious dangers which have been highlighted by social science researchers, repeated identification tasks are not uncommon in practice. Only a few jurisdictions have written policies about repeated identification practices. It is recommended that states should follow the exemplary state practice of Wisconsin which recommends that multiple identification procedures should be avoided at all costs.¹⁰⁵

7 Showups versus Traditional Line-Ups

A showup, in contrast to a traditional line-up, occurs when only one suspect is shown to the witness. Research has found that showups are more advantageous in certain circumstances than traditional line-ups as they allow for the swift apprehension of dangerous criminals thereby minimizing the time delay between the crime and the subsequent identification. This significantly reduces the risk that the perpetrators physical characteristics will have changed and therefore, allows the witness to more easily identify the suspect. Showups however, are believed to be inherently suggestive. Candidates for showups are not selected randomly and witnesses may believe the suspect apprehended near the crime scene is probably guilty and that police officers would not have presented an innocent individual. In a meta-analysis directly comparing the effectiveness of showups and line-ups,¹⁰⁶ showups resulted in more accurate decisions overall (69% versus 51% respectively). There were no differences between participants' correct identifications of the perpetrators in target present showups (47%) or line-ups (45%); yet participants who saw showups made more false rejections and were more likely to say that the perpetrator was not there (58% versus 34% for line-ups). In target-absent presentations participants were more likely to correctly reject showups (85%) than line-ups (57%). Thus, the overall false identification rate was lower for showups (15%) than line-ups (43%).

F THE LEGAL SYSTEMS RESPONSE TO THE PROBLEM OF EYEWITNESS ERRORS

The United States judiciary has been aware for some time of the problem posed by eyewitness error. In 1967, the Supreme Court first addressed the issue of eyewitness identification in a trilogy of cases: *United States v Wade*,¹⁰⁷ *Gilbert v California*,¹⁰⁸ and

¹⁰⁴ Kenneth A Deffenbacher, Brian H Bornstein and Steven D Penrod, 'Mugshot Exposure Effects: Retroactive Interference, Mugshot Commitment, Source Confusion, and Unconscious Transference' (2006) 30(3) Law and Human Behavior 287.

¹⁰⁵ State of Wisconsin, 'Model Policy and Procedure for Eyewitness Identification' Office of the Attorney General, Wisconsin Department of Justice Bureau of Training and Standards for Criminal Justice <http://www.law.wisc.edu/webshare/02i8/ag_model_policy.pdf> date accessed 6 March 2016.

¹⁰⁶ Nancy K Steblay, Jennifer E Dysart, Solomon M Fulero and Roderick CL Lindsay, 'Eyewitness Accuracy Rates in Police Showup and Lineup Presentations: A Meta-Analytic Comparison' (2003) 27(5) Law and Human Behavior 523.

¹⁰⁷ *United States v Wade* [1967] 388 U.S. 218.

¹⁰⁸ *Gilbert v California* [1967] 388 U.S. 263.

Stovall v Denno.¹⁰⁹ In *Wade*, the Court held that because a post-identification pre-trial line-up is a critical stage of a criminal proceeding a defendant has a right under the Sixth Amendment to have an attorney present at a post-indictment line-up. The Court further stated that if an attorney is not present at a post-indictment pre-trial line-up the eyewitness identification of the defendant is inadmissible.¹¹⁰ However, in the event that the post-indictment pre-trial line-up is inadmissible, the State can still use the eyewitnesses' courtroom identification of the defendant as evidence of guilt. It is argued however, that courtroom identifications are notoriously regarded as being fickle, outdated and inaccurate. In *Gilbert*, the Supreme Court held that the State is not entitled to show that eyewitness testimony which was the direct result of an illegal post-indictment line-up could be substantiated by an independent source.¹¹¹ It is submitted that the approach of the Court in *Gilbert* has much to recommend to it. In *Stovall*, the Court held that the totality of the circumstances must be examined when there is an alleged violation of due process in conducting an identification procedure.¹¹² One year later in *Simmons v United States*,¹¹³ applying the same standard it previously enunciated in *Stovall*, the Court ruled that in-court identifications would be permissible notwithstanding the use of suggestive photographs, as long as their use was necessary and the in-court identifications were reliable.¹¹⁴ To criticise the Courts decision, it is submitted that necessity and reliability should not jeopardise the suspect's right to a fair trial. Five years later in *Kirby v Illinois*,¹¹⁵ the Supreme Court clarified its holding in *Wade* and *Gilbert* by ruling that an individual has the right to counsel in a pre-trial identification procedure only if it took place after criminal proceedings had been initiated against the defendant.¹¹⁶ Furthermore, in *United States v Ash*,¹¹⁷ the Supreme Court held that a defendant does not have a right to an attorney at a photo array even if the defendant has been indicted, ruling that a photo array is not a 'trial-like adversary confrontation' meriting Sixth Amendment protection.¹¹⁸ As a consequence of the Supreme Court's ruling in *Kirby* and *Ash*, law enforcement agencies generally conduct line-ups prior to indictments or use photo arrays to identify suspects so they are not required to have the defendant's attorney present at an identification. Thus, the Supreme Court's decision in *Kirby* and *Ash* largely negates the effect of its earlier rulings in *Wade* and *Gilbert*. In *Neil v Biggers*¹¹⁹ and *Manson v Brathwaite*,¹²⁰ the Supreme Court ruled that such identification procedures, even those unnecessarily suggestive procedures, were admissible provided they were reliable. It appears that the Supreme Court decisions taken together are supportive of the admissibility of eyewitness testimony even where highly suggestive identification techniques are used. Despite the fact that US courts have expressly acknowledged the problems with eyewitness reliability for decades, eyewitness

¹⁰⁹ *Stovall v Denno* [1967] 388 U.S. 293.

¹¹⁰ *Wade* (n 107) 240.

¹¹¹ *Gilbert* (n 108) 272-273.

¹¹² *Stovall* (n 109) 302.

¹¹³ *Simmons v United States* (1968) 390 U.S. 377.

¹¹⁴ *ibid* 385-86.

¹¹⁵ *Kirby v Illinois* [1972] 406 U.S. 682.

¹¹⁶ *ibid* 689.

¹¹⁷ *United States v Ash* [1973] U.S. 300.

¹¹⁸ *ibid* at 317.

¹¹⁹ *Neil v Biggers* [1972] 409 U.S. 188.

¹²⁰ *Manson v Brathwaite* [1977] 432 U.S. 98.

identifications are almost invariably allowed into evidence. The problem of witness unreliability is truly enormous but nevertheless it remains insufficiently considered or recognised by judges and juries. This is a substantial problem given that the above scientific research indicates many of the Supreme Court assumptions about eyewitness testimony are erroneous.

H CONCLUSION

To conclude, the United States criminal justice system is inherently flawed and produces both justice and justice in error. Wrongful convictions stem from the belated entrance of scientific rigor into the field of forensics, systemic problems and the ubiquitous human factor. Specifically, eyewitness misidentification is caused by natural psychological errors in human judgment and the failure of police practices during identification tasks. Although mistaken identifications can still occur even when these measures are properly implemented, prosecutors, judges and jurors can be assured that the procedures themselves are not a contributing factor.

In the classic novel 'To Kill A Mockingbird', Judge Taylor proclaims 'people generally see what they look for, and hear what they listen for'. This quote epitomises the fallibility of eyewitness errors and their contribution to miscarriages of justice. Wrongful convictions have shown that the United States criminal justice system needs immediate reform in many areas – both to protect the innocent and to strengthen the work of law enforcement and prosecutors.