Report on the eyewitness evidence in the case of William Gage v HMA

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7th April 2010

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1. I am instructed to prepare a report on the identification evidence in the above case by Aamer Anwar of Aamer Anwar & Co., of Carlton Buildings, 63 Carlton Place, Glasgow G5 9TW. My instructions include a note of instruction by senior counsel M. E. Scott QC.

Qualifications and experience

2. My qualifications and experience are set out in Annex A.

Documentation

3. I have consulted the following documents.

   3.1. A report by the honourable Lord Elmslie in note of appeal by William Lewis Gage.

   3.2. Scottish Criminal Cases Review Commission statement of reasons, May 2009.

   3.3. Report of identification parade 12 -5-2002.

   3.4. Witnesses statements by Tracy McAlroy.

      3.4.1. Statements dated 07/03/02, 11/03/02, 12/03/02, 03/04/02, 12/05/02, precognition dated 11/10/02.

   3.5. Witness statement by Kelly Curry dated 11/03/02.

   3.6. Witness statements by Julie Waugh.

      3.6.1. Statements dated 10/03/02, 14/03/02, 22/03/02, 02/04/02, 12/05/02, precognitions dated 29/08/02 and undated.

   3.7. Witness statements by Phyllis Craig.

3.7.1. Statements dated 07/03/02, 08/03/02, 27/03/02, 30/05/02 & undated.

3.8. Witness statements by Charles Bowman.

3.8.1. Statements dated 08/03/02, 10/03/02, 13/03/02, precognition dated 29/08/02 & 27/10/02.

3.9. Witness statements by James Kearns.

3.9.1. Statements dated 07/03/02, 10/03/02 & 19/03/02.

3.10. Witness statements by Stephen Madden.

3.10.1. Statements dated 13/03/02, 27/03/02, 12/05/02, precognitions dated 27/08/02 and 18/10/02.

3.11. Witness statements by Agnes Edgar.

3.11.1. Statements dated 13/03/02, 16/04/02, precognitions dated 27/08/02 and 18/10/02.

3.12. Photographs of an aerial view of the scene, a selection of white cars, the tailor's mannequin dressed in clothes and photographs of the jacket.

3.13. Transcript of evidence given by Tracey McAlroy.

3.14. Transcript of evidence given by Stephen Madden.

3.15. Transcript of evidence given by Agnes Edgar.

3.16. Transcript of evidence given by Charles Bowman.

3.17. The closing speeches by the prosecution and defence counsel.

3.18. The charge to the jury.

Structure of the report

4. The purpose of this report is to advise the court of relevant research findings which may assist in identifying circumstances and procedures likely to affect the reliability of eyewitness testimony and identification. The report is structured as follows. The principal psychological properties of human memory are described in Section 5. In Section 6 psychological research on facial identification is reviewed. In Section 7 the psychology of object recognition is reviewed. In

section 8 the most salient factors relevant to eyewitness testimony in the current case are discussed. Finally, my conclusions are summarised in Section 9. Where I express an opinion I have used underlining to distinguish my opinion of the evidence from other material.

Psychology of human memory

5. It is a mistake to think of human memory as similar to a mental video recorder that can be re-played and re-examined at will. Instead human memory is a dynamic, active process during which an interpretation of one's experience is reconstructed from cues that may be internally generated or externally provided (e.g. by questioning or other information provided). Our memories are always incomplete, but fill gaps in recollection to organise events into a semantically plausible interpretation. It is not possible to distinguish what we genuinely remember from what we assume happened. These issues are reviewed in a recent report by the British Psychological Society entitled "Guidelines on Memory and the Law" (BPS, 2008). The key points from the report are reproduced in Box 1.

   5.1. When recalling everyday events, our memory is strongly influenced by structures of general schematic knowledge or 'scripts' (e.g. Abelson, 1981, Klieder, Pezdek, Goldfinger & Kirk, 2008). Thus, a memory of buying petrol at a filling station, for example, will be influenced by knowledge of the typical events of such an interaction (e.g. taking the cap off the tank, placing the nozzle in the tank, paying in the kiosk etc.). A script such as this will influence recollection when a relevant episode is recalled.

   5.2. Episodic memory has been distinguished from semantic memory (e.g. Wheeler, Stuss & Tulving, 1997). Semantic memory refers to our general knowledge of facts. (For example, knowing that Edinburgh is the capital city of Scotland.) Episodic memory refers to memory for specific events. For example, remembering a specific visit to the Edinburgh Festival. Eyewitnesses provide testimony about something they saw or heard, that must be attributed to the correct time and place (i.e. an episode).

5.3. Memory for one's own life events is more specifically referred to as autobiographical memory. Eyewitness testimony requires recall of an autobiographical memory within a forensic context. Studies of autobiographical memory show that we have difficulty remembering specific events in which we participate frequently, for example eating breakfast, attending committee meetings, or driving to work (e.g. Wagenaar, 1986). Our memories tend to be general so that we have a generic memory of a typical repeated event, rather than discrete memories for each time a repeated event has occurred. Recall of a specific event may be difficult unless there is a particular reason to remember it at the time the event occurs.

5.4. Details recalled may migrate from one memory of a repeated event to become associated with a similar event that occurred on a different occasion. A common memory error is to misattribute the source of a memory, known as a source attribution error (Johnson, 2006; Johnson, Hashtroudi & Lindsay, 1993). An example of a source attribution error may be the belief that one read about a news story in the paper when it was actually it was heard on the radio, or by attributing an action to the wrong person (e.g. Kleider *et al*. 2008). Such errors in source attribution tend to occur more commonly in older rather than young adults (Cohen & Faulkener, 1989; Multhaup, De Leaonardis & Johnson, 1999).

5.5. Two modes of recognition memory can be distinguished. Somebody may recognise an object because they *recollect* the specific episode when they encountered it previously (e.g. Jacoby & Dallas, 1981). Alternatively they may just *know* that they've seen the object before because it seems familiar. For example, we may 'recognise' a face or object because it seems familiar, but be unable to 'place' why it is familiar. In this way a feeling of familiarity may be misattributed to the wrong source.

BOX 1: Guidelines on Memory and the Law (BPS, 2008)

Key Points:-

i. Memories are records of people's experiences of events and are not a record of the events themselves. In this respect, they are unlike other recording media such as videos or audio recordings, to which they should not be compared.

ii. Memory is not only of experienced events but it is also of the knowledge of a person's life, i.e. schools, occupations, holidays, friends, homes, achievements, failures, etc. As a general rule memory is more likely to be accurate when it is of the knowledge of a person's life than when it is of specific experienced events.

iii. Remembering is a constructive process. Memories are mental constructions that bring together different types of knowledge in an act of remembering. As a consequence, memory is prone to error and is easily influenced by the recall environment, including police interviews and cross-examination in court.

iv. Memories for experienced events are always incomplete. Memories are time compressed fragmentary records of experience. Any account of a memory will feature forgotten details and gaps, and this must not be taken as any sort of indicator of accuracy. Accounts of memories that do not feature forgetting and gaps are highly unusual.

v. Memories typically contain only a few highly specific details. Detailed recollection of the specific time and date of experiences is normally poor, as is highly specific information such as the precise recall of spoken conversations. As a general rule, a high degree of very specific detail in a long-term memory is unusual.

vi. Recall of a single or several highly specific details does not guarantee that a memory is accurate or even that it actually occurred. In general, the only way to establish the truth of a memory is with independent corroborating evidence.

vii. The content of memories arises from an individual's comprehension of an experience, both conscious and non-conscious. This content can be further modified and changed by subsequent recall.

viii. People can remember events that they have not in reality experienced. This does not necessarily entail deliberate deception. For example, an event that was imagined, was a blend of a number of different events, or that makes personal sense for some other reason, can come to be genuinely experienced as a memory, **(these are often referred to as 'confabulations').**

ix. Memories for traumatic experiences, childhood events, interview and identification practices, memory in younger children and older adults and other vulnerable groups all have special features. These are features that are unlikely to be commonly known by a non-expert, but about which an appropriate memory expert will be able to advise a court.

x. A memory expert is a person who is recognised by the memory research community to be a memory researcher. It is recommended that, in addition to current requirements, those acting as memory expert witnesses be required to submit their full curriculum vitae to the court as evidence of their expertise.

5.6. Psychologists distinguish *explicit* memory, of which we are aware, from *implicit* memory of which we may not be aware (e.g. Graf & Schacter, 1985). Memory may influence our behaviour (or response), even when we are unaware of its influence. Therefore, asking a witness whether their recall has been influenced by a prior event is not an appropriate method to determine the influences on a witness's memory.

5.7. Many experiments have demonstrated that being exposed to misleading (i.e. incorrect) information can distort an eyewitness's memory (e.g. Loftus, 2003; Loftus & Hoffman, 1989; Wright & Loftus, 1998). Misleading information may be acquired from leading questions, other witnesses or other information acquired after an event. For example, consider a witness who saw a traffic accident at a road junction at which there was a 'Stop' sign. The witness is then exposed to misleading information from a leading question – "Did you notice the 'Give Way' sign?" When subsequently questioned about the accident a proportion of witnesses reported the misleading information, which was acquired after the event. That is, witnesses incorrectly reported seeing a 'Give Way' sign. The proportion of witnesses who are misled will depend upon the circumstances but it has been found that more witness who were exposed to the misleading information made this error than did witnesses who were not exposed to any misleading information (e.g. 75% vs. 41%). The participant 'witnesses' in such experiments may confuse the source of the information to which they have been exposed.

5.8. A number of factors have been found to affect the magnitude of the misleading information. Suggestibility is affected by witness age (e.g. Coxon & Valentine, 1997). Witnesses are more likely to be misled on peripheral than on central details (e.g. Coxon & Valentine, 1997, Wright & Stroud, 1998), and are less likely to be misled about events in which they participated rather than merely observed (e.g. Rudy & Goodman, 1991). An authoritative source of misleading information, that is somebody who is believed to be knowledgeable about the crime, is more likely to distort witness memory (e.g. Smith & Ellsworth, 1987).

The effect of misleading information is greater when there is a long delay between the original event and the acquisition of misleading information (Belli, Windschitl, McCarthy & Winfrey, 1992). See McAuliff and Kovea (2007) for a summary of this literature.

5.9. Misleading information may also be derived from somebody else who witnessed an event. For example, in one study two participants watched a video of a theft. They were led to believe that they had seen the same video. In fact, they had seen the same events filmed from a different angle; only one participant actually saw the theft. Very few participants who did not see the theft, and did not talk to anybody else about the video, spontaneously reported incorrectly that they saw a theft. However, after discussing the video with a co-witness who did see the theft, 70% of participants who did not see the theft themselves reported seeing the actor steal some money (Gabbert, Memon & Allen, 2003). This phenomenon is believed to have occurred in the investigation of the Oklahoma bomb. A witness reported hiring a van to two men. Other witnesses initially only mentioned one man, but subsequently changed their testimony to include a second man. Although Timothy McVeigh was identified, a second man was never traced (Memon & Wright, 1999).

5.10. Cross-examination usually involves a style of questioning that is known to distort witness' memory. For example, many leading questions are used and a witness' account may be challenged. Zajac and Haynes (2003; 2006) have shown that cross-examination distorted the memory of young children. Their testimony from cross-examination was less accurate than their testimony prior to cross-examination. A study conducted in my own laboratory at Goldsmiths, University of London has found the same effect in young adult witnesses after cross-examination by barristers in training (Valentine & Maras, submitted).

Psychology of facial identification

6. Mistaken eyewitness identification is the leading cause of wrongful conviction. In the USA mistaken eyewitness identification was a factor in over 75% of 250 wrongful convictions that

have been overturned on the basis of DNA evidence that was not available at the original trial.[1] Identifications made by multiple eyewitness may be mistaken. Analysis of mistaken eyewitness identification in the first 40 DNA exonerations found that 17.5% involved identification by more than one eyewitness. One case involved mistaken identification by 5 witnesses (Wells, Small, Penrod, Malpass, Fulero & Brimacombe, 1998).

6.1. There has been a great deal of scientific research into the relationship between the confidence with which a witness makes an identification and probability that their identification is accurate. Is a confident witness likely to be more accurate? The degree of confidence that a witness expresses in his or her identification is moderately related to accuracy (Brewer, 2006). As the relationship is only moderate, confident but mistaken eyewitnesses will be encountered fairly frequently.

6.2. Very confident eyewitnesses can be mistaken. There is a very clear example from a well-known case from the USA.. Jennifer Thompson was raped in 1984 and mistakenly identified Ronald Cotton, who served 11 years in prison before being exonerated by DNA evidence. Jennifer Thompson stated: "I was completely confident. I was sure." Referring to another eyewitness in a capital case, Jennifer Thompson stated: "she cannot possibly be any more positive than I was about Ronald Cotton" (Thompson, 2000). These issues have been well known in England and Wales since the publication of a Home Office report into eyewitness identification in criminal cases (Devlin, 1976). The report analysed the case of Mr Virag, in which eight witnesses made the same mistaken identification. Five of the witnesses were police officers (Devlin 1976, appendix D). Devlin concluded: "the witness who has sincerely convinced himself and whose sincerity carries conviction is not infrequently mistaken" (Devlin, 1976, paragraph 8.1). The Devlin report directly led to a judgment of the Court of Appeal which laid down an obligatory set of standard warnings to the jury on the dangers of eyewitness identification (R v Turnbull and others, 1976). Notwithstanding the

[1] See: http://www.innocenceproject.org/ . For analysis of the role of mistaken eyewitness identification see

legal reforms in England and Wales since 1976, it remains the case that 20% of all witnesses make a known mistaken identification when attending a police identification procedure (Valentine, Pickering & Darling, 2003; Wright & McDaid, 1996).

6.3. The effects of suggestion and misleading information on eyewitness testimony reviewed in Section 5 apply equally to eyewitness identification. Suggestion may arise from prior exposure to photographs of the suspect, non-verbal cues from police during identification procedures or information acquired from police or from media reports. Research in this area is typically derived from experiments involving young student participants, who watch a staged crime either live, but more usually on a video, and their recollection is tested after a delay of a few minutes to a few days. These factors will tend to result in laboratory studies over-estimating the proficiency of eyewitnesses.

6.4. The effects of four factors are relevant to the present case: The opportunity to view the culprit, stress, delay and feedback.

6.4.1. *The opportunity to view:* English case law is based on the premise that a distinction between good and poor eyewitness identification evidence is possible. Following a landmark ruling in the Appeal Court in London (R v Turnbull and others, 1976), when identity is disputed a trial judge must advise the jury to consider carefully the circumstances of an identification. In a case that relies substantially on disputed eyewitness identification evidence, the trial judge must warn the jury about the special need for caution before relying on the accuracy of eyewitness identification evidence to convict the defendant. The judge should make some reference to the possibility that a convincing witness may be mistaken and that a number of witness who make the same identification may all be mistaken. The judge should direct the jury to consider carefully the circumstances of the identification made by each witness. The jury should be directed to consider the amount of time for which the perpetrator was in view, the

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http://www.innocenceproject.org/understand/

distance of the witness from the perpetrator and visibility of the perpetrator. How good was the lighting? Was there any obstruction to the witness' view? The jury should also be directed to consider whether the person seen was known to the witness. Has the witness seen the suspect before? Does the witness have any special reason to remember the perpetrator. Is there any material discrepancy between the description given to the police at the time of the incident and the appearance of the suspect? The jury are also directed to consider the delay between the incident and any formal identification procedure. This issue is discussed separately in paragraph 6.4.6 below.

6.4.2. Subsequent laboratory research has confirmed that most of the factors mentioned in the Turnbull guidelines are likely to affect the accuracy of eyewitness identification. For example, witnesses who had 45 seconds to view a culprit were more likely to identify him from a lineup than witness who had only 12 seconds to view (Memon, Hope & Bull, 2003). The data show that face recognition is impaired if the viewing distance exceeds approximately 12 - 15 metres or the face is viewed at night, even under bright urban street lighting (Waganaar & Van der Schrier, 1996). Witnesses under-estimate distances under 30m (Lindsay, Semmuler, Weber, Brewer & Lindsay, 2008). Faces of people known to the viewer are remembered in an episodic memory task with much greater accuracy than are unfamiliar faces, when a different view of the face is presented in the study and test phase of the experiment (Bruce, 1982). The only factor mentioned in the Turnbull warning that seems difficult to justify from laboratory research is the issue of error in the description. The research suggests that the quality of a verbal description is not strongly associated the accuracy of a subsequent identification (e.g. Pozzulo & Warren, 2003). However, in a field study of police identity parades, Valentine *et al.* (2003) found that witnesses who gave a detailed first description of a perpetrator were more likely to identify the police suspect. It should be noted that this

effect relates to the quantity of descriptors and not whether they were accurate descriptions of the suspect.

6.4.3. *The effect of stress:* Are witnesses who experience a very frightening or stressful event less reliable than witnesses who experience less stress? Deffenbacher, Borstein, Penrod, and McGorty (2004) reported a meta-analytic review of studies that successfully manipulated stress, demonstrated by measures taken as soon as possible after encoding the target person. They found that heightened stress had a moderate negative effect on identification and on recall of a target person. The effect of stress on identification was restricted to the number of correct identifications made when the target person was included in the lineup; there was no effect of stress on the rate of correctly rejecting the lineup when the target person was not present.

6.4.4. Morgan, Hazlett, Doran, Garrett, Hoyt, Thomas, Baranoski, and Southwick (2004) examined the ability of solders to recall a person present at an interrogation. The solders had been detained for 12 hours in a mock prisoner of war camp. Each solder then underwent a high stress interrogation involving physical confrontation and a low stress interrogation. Twenty four hours later the soldiers took part in an identification procedure. Identification was more accurate for the target person seen during a low stress interrogation (67%) than for the person seen during a high stress interrogation (29%).

6.4.5. Valentine and Mesout (2009) investigated the ability of members of the public to describe and identify an actor who unexpectedly blocked their path during a visit to the Horror Labyrinth at the London Dungeon. After the visit, participants completed a questionnaire measure of their state anxiety in the Labyrinth (i.e. how they felt at that moment). High state anxiety was associated with reporting fewer correct and more incorrect descriptors of the target person, and making fewer correct identifications from a lineup. Seventy-five percent of participant who reported low state anxiety correctly

identified the actor they had met in labyrinth from a six person photo-spread. Only 18% of participants who reported high state anxiety made a correct identification. The measure of state anxiety was validated by another set of participants who wore a wireless heart rate monitor. Participants who reported experiencing higher state anxiety had a higher heart rate whilst in the Labyrinth.

6.4.6. *Delay:* Deffenbacher, Bornstein McGorty and Penrod (2008) provide a detailed theoretical integration and meta-analysis of the effect of delay on recognising a face that had only been seen once. A meta-analysis of 53 studies showed a highly reliable effect of delay on recognition accuracy. In a meta-analysis of 18 face recognition and eyewitness identification studies Shapiro and Penrod (1986) found that delay had an effect of moderate size on both correct identifications and mistaken identifications. The delay in the studies analysed had a mean of 4.5 days with a standard deviation of 21 days.

6.4.7. *Feedback:* A very common distortion of memory arises from feedback given to, or acquired by the witness. It has been shown that witness confidence is changeable and is influenced by information that the witness acquired after attending an identification procedure. If a witness received feedback that they have identified the police suspect, or that somebody else made the same identification, the witness' confidence in their identification is likely to increase. Not only does confirming feedback tend to make the witness subsequently more confident in their identification, but it also tends to inflate estimates of a range of subsequent testimony including how long the culprit was seen for, how close they were, how much attention the witness paid, and their own willingness to testify (Wells & Bradfield, 1998). Furthermore, confirming post-identification feedback tends to make eyewitnesses over-confident. That is, after confirming feedback witnesses expressed more confidence in their identification than is justified by their accuracy (Semmler, Brewer, & Wells, 2004). Wright and Skagerberg

(2007) showed that feedback affected the confidence of witnesses and victims of real crimes. A statement of confidence obtained immediately after the identification and prior to the witness receiving any feedback will be a better indication of their accuracy than later statements of confidence. Subsequent indications of confidence are likely to be distorted by feedback or other post-event information.

6.5. *Identification procedures:* Identification procedures should be designed to be *sensitive* (i.e. allow a reliable witness to make an accurate identification); *fair* (i.e. include safeguards for an innocent suspect against being mistakenly identified); and avoid sources of memory *distortion* (i.e. minimise suggestibility from post-event information, social influence or source misattribution).

6.6. Much of the research on eyewitness identification has been directed towards procedures used in the USA. Identification from both live lineups (identity parades) and from an array of photographs (photospread) is widely used to obtain formal identification evidence in America. Procedures differ between different states and counties. There is no minimum number of foils or lineup members specified. Typically an array of six photographs is used; consisting of a photograph of the suspect and five foils. A large body of research was reviewed by Wells *et al.* (1998) in a paper adopted by the American Psychology – Law Society, a section of the American Psychology Association. Wells *et al.* recommend four rules of best practice. These rules are intended to apply to identification from photospreads and live line-ups.

6.6.1. Rule 1: The person who conducts the lineup or photospread should not be aware of which member of the lineup or photospread is the suspect.

6.6.2. Rule 2: Eyewitnesses should be told explicitly that the person in question might not be in the lineup or photospread and therefore they should not feel that they must make an identification. They should be told that the person administering the lineup does not know which person is the suspect in the case.

6.6.3. Rule 3: The suspect should not stand out in the lineup or photospread as being different from the distractors based on the eyewitness' previous description of the culprit or based on other factors that would draw extra attention to the suspect.

6.6.4. Rule 4: A clear statement should be taken from the eyewitness at the time of the identification and prior to any feedback as to his or her confidence that the identified person is the actual culprit.

6.7. These rules are designed to ensure the following conditions are met.

6.7.1. The administrator (or identification officer) does not give any cues that might lead the witness (i.e. to prevent suggestion).

6.7.2. The witness understands that they do not have to make an identification and that making no identification might be the 'correct' response. The purpose is to reduce any perception by the witness that it is appropriate to select the person in the lineup who looks most like the culprit.

6.7.3. The lineup is fair and that nothing draws attention to the suspect.

6.7.4. The degree of confidence expressed by the witness is not distorted by performance feedback.

6.7.5. The principle of blind administration is universally accepted in behavioural science and medical drug trials. For example in a drug trial, neither the doctor nor the patient should know whether the patient received the drug or a placebo (known as a double-blind trial). Knowledge of the experimental condition may affect the reporting of benefits or side-effects by either the patient or the doctor. The effect may be entirely unconscious. Clark, Marshal and Rosenthal (2009) and Greathouse and Kovera (2009) provide recent further evidence and discussion of blind testing in the context of eyewitness identification.

6.8. A guide to best practice which incorporates the four rules proposed in the American Psychology – Law Society paper has been drawn up by the US Department of Justice (Technical Working Group for Eyewitness Evidence, 1999).

6.9. *Identification under English Law:* In England and Wales a code of practice (code D) required by the Police and Criminal Evidence Act (1984) (PACE) has been developed to provide important safeguards against the risk of mistaken eyewitness identification. The most frequently used procedure is now a video identification.

6.9.1. An identification procedure must be conducted by an identification officer who has not been involved in the investigation. The rationale is to reduce the risk of leading the witness by requiring that no investigating officer takes any part in the identification procedure. The English procedure does not require blind administration. The person administering the lineup does know the identity of the suspect.

6.9.2. The witness must be advised that the person they saw may or may not be present and that if they cannot make a positive identification they should say so.

6.9.3. A video lineup should comprise the suspect and minimum of eight volunteers who "resemble the suspect in age, general appearance and position in life".

6.9.4. The witness must view the entire lineup at least twice before making any identification.

6.9.5. The suspect has the right for a legal representative to be present. The suspect and the legal representative may object to the procedure (e.g. the selection of foils) and their reason for objection must be recorded. If the witness has previously been shown photographs, details of the photographs shown should be recorded. Anything the witness says should be written down before the witness leaves the identification room.

6.9.6. In England and Wales witnesses are not asked if there is anybody in the lineup who resembles the person they saw. This question was considered but rejected by Devlin

(1976), who pointed out that all lineup members have been selected for their resemblance to the suspect (Devlin 1976; paragraph 5.62).

6.10. *Dock Identification.* Any test of memory should be capable of demonstrating a lack of memory or error. A lineup, whether shown live as an identity parade or on video, is capable of demonstrating that a witness has made an error if a foil is identified. As noted above, a mistaken identification of a foil is made by approximately 20% of witnesses. One problem with a dock identification is that, if the witness makes an identification, there is no way of knowing if it is correct or not. Of course this is true if a witness identifies the suspect in a lineup. However, a witness who identifies the suspect from a lineup has passed the test of selecting the police suspect from amongst others selected for their resemblance to the suspect.

6.11. A dock identification is a strongly suggestive procedure. The procedure creates a powerful expectation, and therefore social pressure on the witness, to identify the defendant. Other people in the court, or even in the dock, have not been selected for their resemblance to the defendant. In many cases the only other person in the dock will be a police officer or security guard in uniform. It is also obvious that the defendant is present only because the Crown believes there is sufficient evidence to bring a successful prosecution. Prosecuting counsel and the implicit approval of the judge give considerable authority to the request. There is considerable social pressure from the presence of many people in a court, whose shared attention is on the witness. It requires some considerable self-confidence for a witness not to acquiesce to the request and identify the defendant.

6.12. There are only two plausible responses to a request to make a dock identification: either to identify the defendant or to refuse to make an identification. As discussed above, the willingness of a witness to make an identification is affected by feedback. Specifically knowledge that another witness has identified the same person or merely that the person identified is the police suspect is sufficient to increase the willingness of witnesses to testify

against the suspect. There is no reason to believe that the inflation of witness confidence is limited to these factors. In my opinion similar feedback or knowledge of other evidence against the suspect is likely to have a similar effect.

6.13. A dock identification may be viewed as a test of the willingness of a witness to testify against the suspect. A failure to make a dock identification when invited to do so may be interpreted as evidence that the witness does not believe that the suspect is the perpetrator, that the witness could not identify the perpetrator, or that the witness is unwilling to make an identification.

Psychology of object recognition

7. Visual memory for objects has similar properties to visual memory for faces. Therefore, memory performance will be affected by the same factors and show similar characteristics (e.g. decay over time and interference from similar memories). Usually memory for objects requires object categorisation at a basic level (i.e. recognition of a mug, a chair, a table). The forensic context requires identification of individual objects at subordinate level. This may require a finer level distinction that is based on familiarity within an object class (e.g. recognition of a car as a Ford Focus) or even recognition at the level of an individual entity (e.g. the actual jacket worn by the culprit).

7.1. The ability to make subtle but reliable distinctions between types within a class of objects (e.g. cars, birds) is strongly affected by expertise with the object class. Face recognition is considered the ultimate in our ability to make fine visual discrimination in a class of objects. Experts show similar processing characteristics to face processing in their domain of expertise. Curby, Glazek and Gauthier (2009) found that car experts but not car novices showed similar visual short-term memory characteristics for cars and faces. Expertise enables objects to be encoded in a meaningful way related to knowledge of the domain; allows retrieval cues to be used efficiently to access the relevant knowledge, and allows the

expert to process stimuli more quickly and efficiently. Expertise provides a specific language to code stimuli verbally that captures the similarity available in knowledge of the category (e.g. a breed of dog, a species of bird or a make of car). Multiple memory codes (e.g. visual, verbal) facilitates memory and contribute to the advantage for processing familiar faces compared to unfamiliar faces (Bruce, 1982).

7.2. *Recognising cars*: There are few studies on memory for cars. McKelvie, Standing, St Jean and Law (1993) found that men performed better in recognising line drawings of cars than did women. This effect was interpreted as a function of men's greater interest in cars. Wright, Self and Justice (2000) and Wright, Matthews and Skagerberg (2005) found that memory for photographs of cars can be influenced by discussion with a co-witness. When remembering cars, faces and words, Wright *et al.* (2005) concluded that people rely more on other people's memories for unremembered objects than for remembered objects. Loftus (1977) found that memory for the colour of car involved in an accident is distorted a post-event misleading suggestion that it was of a different colour. Participants not exposed to the misleading information do not show the same memory distortion.

7.3. *Recognising clothes:* The ability to recognise an individual entity from amongst similar examples would require high familiarity with the individual object. For example, recognising your own coat when leaving a party is easy if other coats are dissimilar. But if several coats are of a similar type it becomes more difficult to identify your own. Due to lack of familiarity with a once-seen item of clothing, identification of clothing in an eyewitness situation is likely to be only identification of resemblance.

7.4. *Lineup procedure:* The lineup or identity parade has been designed to provide a memory test for a witness. If the witness identifies a foil, an error has been demonstrated. It is recognised that simply allowing the witness to see the suspect in a confrontation is not a fair way to obtain identification evidence. Simply asking "Is this the person you saw?" is a leading question and carries all the risks of suggestion and memory distortion discussed above. For

this reason, use of a confrontation to obtain eyewitness identification evidence has fallen into disrepute and disuse. Exactly the same issues apply to identifying property. Showing the witness a jacket or a car and asking "Is this the jacket (car) you saw?" is a leading question. If the jacket or car does not match the description that the witness gave, the question is more strongly leading. The witness is capable of inferring that the police have a reason to be asking for identification of the item concerned. A more appropriate way to determine whether the witness can identify an item of property is to place the suspect item amongst other items, known not to be connected to the suspect, but which match the description that the witness gave. If the suspect property does not match the description, the 'foil' items should be chosen to resemble the suspect item. However, if the suspect item differs from the item described in substantial features, it is probably inappropriate to show the item to the witness at all. The witness is unlikely to identify the item and showing it may be prejudicial due to the suggestion of running the procedure.

7.5. Note that the foils in a property lineup must be 'innocent' items that are not associated with the crime. For example, a lineup would not provide a safeguard if the jackets presented were all the property of the suspect, or each jacket was the property of a different suspect. As far as possible, best practice for conducting an identity parade or a video identification should be followed.

7.6. A physical lineup may be preferable. If it is not practicable to provide a physical lineup, identification from photographs is adequate. Effects of the test media used (live, video, photographs) in facial identification are small. As far as practicable the viewpoint in the photographs should match the view the witness had at the crime scene.

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8. The main issues that the relevant to the reliability of eyewitness identification in this case are discussed below:

8.1. *Opportunity to view:* The witnesses at the crime scene in Acacia Way and the witnesses who saw the white car leaving the scene had only a fleeting glimpse of the perpetrator fleeing at night. Julie Waugh reported the most extended opportunity to see the man, although even she had only a few seconds to view him. The detail that can be perceived and remembered will be limited by distance, lighting and time to view. Furthermore, the perpetrator's face was occluded by a scarf over his mouth and nose and by a hood. None of the witnesses, with the exception of Steven Madden, describe any facial feature at all. It would be consistent with the science of human memory if a witness could only report a general impression or gist of what they saw. Corroboration of details reported by different witnesses increases the likelihood that the detail is correct, provided that the witnesses have not had the opportunity to discuss what they saw or to receive information from another witness via a third party (e.g. an interviewer).

8.2. Some witnesses made statements that were inconsistent in some details with their previous statements. This raises the question of which statement is most likely to be accurate. The general criteria are as follows.

8.2.1. The first statement will have been made when there is the minimum of delay. In this case statements were collected within a few hours of the offence. More importantly the first statement may have been made when the witness has had least opportunity to acquire post-event information. It is important to consider at which point a witness may have had the opportunity to talk to a co-witnesses or to obtain information from the police. Interviewers may pass on information, possibly unintentionally, from other witnesses or other aspects of the investigation. Information may be inferred by the witness from leading questions. For example asking a witness whether the car they saw might have been a Saab is a leading question.

8.2.2. Information provided in an initial free recall is likely to be accurate but incomplete. An initial free recall usually contains relatively few errors but may omit information.

Responses to non-leading question will elicit more information, but are likely to include more errors because the questions prompt witnesses to report information they are unsure of. Equally asking new questions or a question in a different way may prompt extra accurate information. The witness may not have reported useful information they remember, simply because they did not think to include it in an initial statement. Leading questions can prompt new information but greatly increase the probability of eliciting erroneous information.

8.2.3. One limitation of the analysis possible in this case is that there is no record of the questions that have been asked. However, on some occasions it can be inferred when post-event information was presented from a statement. (e.g. "I was shown a white car that I notice was a white Saab."; "I been shown the following items of clothing which I am able to identify as similar …")

8.2.4. If testimony from a witness in one statement is contradicted in a later statement, the possibility that the witness may have encountered post-event information consistent with the change should be considered carefully. If so, memory distortion provides a plausible explanation for the change. In these circumstances the earlier statement is more likely to be a true reflection of the witness' memory. An example of leading post-event information includes being shown property that is inconsistent with an earlier statement or learning that another witness gave a different description.

8.2.5. Both Stephen Madden and Agnes complain of long and accusatory interviews (Stephen Madden's precognition of 18/10/02; Agnes Edgar's precognition of 18/10/02 and evidence at trial.) A long and accusatory interview is a risk of creating the interview conditions that lead to error in eyewitness testimony. The witness may feel under pressure to report more detail than they can confidently recall. The instruction to 'only recall detail that you are sure about' and 'not to guess' has been found to lead to fewer incorrect details being reported. These instructions form part of the cognitive interview

procedure using in police interview training. An accusatory interview is likely to include closed, repeated and leading questions and statements or accusations made instead of questions asked. The cognitive interview training is designed to minimise the use of these question types.

8.3. *Identification procedures used for the Saab*. In my opinion, the procedures used to obtain identification in this case were strongly suggestive. Charles Bowman was shown a fire-damaged Saab in the police station car park. His previous description was that the car was a Volvo. He had later identified the car as a Volvo 440. He had described a spoiler on the boot. The car shown to Charles Bowman did not have a spoiler and differed from the make he described. The witness may be capable of inferring that the police believe the car shown to be the getaway car and that he was mistaken about it being a Volvo. Misleading information can more readily lead to memory distortion when the memory trace of the original information is weak. In view of his limited opportunity to view and the suggestion of a mistake, it is unsurprising that a reasonable witness will accept the possibility of having made an error.

8.4. The police appear to have used two different methods to attempt to obtain identification evidence of the white Saab. In his statement of 13th March 2002 and evidence Charles Bowman stated that he was shown a single car – white Saab, which he acknowledged was 'similar to the car I said was a Volvo' (Statement 13/03/02). Stephen Madden's statement of 12th May 2002 reported being shown 6 motor vehicles in a car park and being unable to identify the car he saw. The lineup of white cars is the preferred method, because it is a less suggestive method. The reasoning is exactly the same as to why an identity parade is preferable to a confrontation.

8.5. *The aborted identity parade:* Witnesses Tracy McAlroy and Julie Waugh were invited to attend an identity parade. The intention appears to have been to run a parade with the participants wearing a hood and a scarf over the lower half of their face. Neither witness had

described the perpetrator's face. In my view it was not appropriate to attempt this procedure. People cannot reliably identify another person, whether familiar or unfamiliar from their build. Burton *et al.* (1999) showed that recognition of familiar people from poor-quality CCTV with gait or the body disguised but their face visible was accurate, with over 80% of targets correctly identified and a low rate of mistaken identification (approximately 2%). However, if the face was covered and only the gait and body were available for recognition accuracy dropped to less than 20% of targets correctly identified and more than 10% of unfamiliar people mistakenly identified. Although the quality of the imagery in this study is described as "poor" it met the Home Office standard for recognition of a 1.6m body filling 50% of the height of the frame or greater (Aldridge, 1994). This study investigated recognition of familiar people (work colleagues) with no requirement to remember the imagery. Therefore the task studied by Burton *et al*. would be considerably easier than recognition of an unfamiliar person from memory by their build alone. In my opinion, the proposed lineup would have been an unreliable test even for a highly reliable witness who had a good opportunity to view the offender. From a scientific point of view an identity parade of men with the lower half of their faces and their head covered with a hood was inappropriate. Furthermore, a lineup should not be used if there is no first description of the face of the offender. There was no indication from any of the witnesses statements available to me of even the ethnicity, hair length, hair colour or broad facial characteristics such as face shape of the offender having been described, with the exception of Stephen Madden. It might have been reasonable to ask Stephen Madden to attend an identity parade, although he had only a fleeting glance of the perpetrator. However, the parade should have been conducted without obscuring the face of any of the lineup members.

8.6. William Gage objected to the lineup on the grounds of the age of the volunteers. The volunteers were aged 18 – 20. Mr Gage was 31 years old. I note the stand-ins were not similar in hair length. The parade does not meet the requirement of the Scottish Home and

Health Department guidelines to place the accused "beside persons of similar age, height, dress and general appearance" (paragraph 10, Scottish Home and Health Department, 1982). From scientific point of view the suspect would stand out. See rule 3 of the American Psychology-law Society white paper (Wells, 1998) referred to above at paragraph 6.6.3 and the Guide published by the Technical Working Group for Eyewitness Evidence (1999) of the US Department of Justice.

8.7. Mr Gage referred to media publicity about his age. If there is the possibility that the witnesses might have known the age of the accused from media publicity the unfair lineup would have posed an even greater risk. Information acquired via the media would have provided a basis for selecting the suspect and could have distorted the witnesses' memories via suggestion.

8.8. *The mannequin:* Tracy McAlroy was confronted by a mannequin dressed in the jacket, trousers, scarf and gloves recovered from the abandoned Saab. The hood was up. The mannequin was dressed in an attempt to simulate the appearance of the gunman. The mannequin had prominent eyes that can be seen in the photographs. I understand that Tracy McAlroy was shown the mannequin without warning. Her testimony shows that she was disturbed and upset by its appearance. The procedure is highly suggestive. In my opinion, showing the mannequin without preparing the witness for the procedure is likely to evoke an emotional response and recall of the events of 7th March 2002. Dressing and arranging the mannequin in this manner will create a broad global similarity to the gunman, i.e. dark clothing, a jacket with a hood, and scarf. The global similarity will be perceived even if some of the details are different (e.g of the jacket). In my opinion, the global similarity will bias the witness towards identifying the individual items of clothing.

8.9. A single mannequin was shown. This is the logical equivalent of a confrontation of the suspect, and carries with it all of the risks of suggestion and memory distortion associated with a confrontation discussed above.

8.10. If the police thought that the mannequin confrontation was a reasonable procedure to identify the clothing, did they show the mannequin to other witnesses who saw the gunman (i.e. Phyllis Craig and Julie Waugh)? Stephen Madden mentions in his precognition of 18th October 2002 that was shown the mannequin but did not identify the clothing. I have not seen a statement that reports this attempted identification of the clothing. It is important to record statements of all identification attempts (of persons, or property). Taking statements only from witnesses who purport to make an identification introduces a bias into the record of the evidence.

8.11. Julie Waugh was shown a different jacket – a Beige Timberland Jacket. Which she identified as similar. Julie Waugh probably had the best opportunity to view. Why was this jacket shown to only one witness?

8.12. A better procedure would have been to present a lineup of clothing in which only one item was associated with the suspect. Any damage or distinguishing marks could be covered, and the same parts could be covered on all the jackets. The same lineup can be shown to all relevant witnesses.

8.13. *Dock identification:* The problems associated with a dock identification as formal identification evidence are discussed at paragraphs 6.10 – 6.13.

8.14. Tracy McAlroy noted a resemblance of the gunman to Mr Gage in the dock. She did not make an identification. When asked: "Are you able to say whether that is the man you saw?" She answered "I'm not." She mentioned his eyes several times and stated that she was not "a hundred percent sure". Tracy McAlroy had not mentioned seeing the perpetrator's eyes in any of her statements before this occasion. She had never described the eyes of the man she saw. The mannequin that she was shown approximately 19 months before giving evidence did have prominent eyes. By the time of the trial she will have had a memory of two events; seeing the killer on the night of her husband's murder and seeing the mannequin. The memories are associated with each other. Both will be emotional memories, because

seeing the mannequin evoked the memory and emotion of the murder. Psychological evidence shows that known effects of the suggestion of post-event information may cause some aspect of the later encountered information (e.g. the mannequin's eyes) to be come associated with the original memory. It is plausible that the witness has made a source attribution error by attributing her memory of the eyes to the wrong source. In attempting to ascertain whether the memory of the eyes is incorrectly associated with the perpetrator it is essential to consider whether there is any evidence of memory of the perpetrator's eyes prior to encountering the mannequin.

8.15. The difficulty of interpreting a resemblance of the eyes is entirely attributable to the unconventional use of a mannequin. If the police had collected identification evidence by showing a lineup of jackets, the issue would not have arisen because the witness would not have seen the mannequin.

8.16. Stephen Madden is the only witness who described the face of a man believed to be the perpetrator. He did not make a dock identification or note any resemblance. His description of a 'ball' face and short hair does not in any way match the accused. Stephen Madden's testimony, which is not contaminated by a suggestive identification procedure, is consistent with the conclusion that Mr Gage was not the gunman. This consistency is present from his first statement to his evidence in court.

Summary and conclusions

9. My conclusions are set out below.

9.1. Psychological science shows that the following procedures used in this case can result in memory distortion through suggestion.

9.1.1. Showing a single item of property to a witness for identification despite considerable mismatch of the property with the witnesses description. This is leading post-event information and may have affected identification of the car.

9.1.2. Confronting a witness with mannequin dressed in clothing associated with the suspect. By inducing a strong emotional response and by the strongly suggestive nature of the procedure it is likely to result in memory distortion and source misattribution of memory. This factor may have affected the identification of the clothing.

9.1.3. It is inappropriate to attempt an identity parade for witnesses who have not described the perpetrator's face or hair and say they can't identify the man they saw.

9.1.4. Mistaken identification of foils occurs frequently at a lineup. A dock identification does not provide an adequate test of memory because such an error can not be detected. A request to make a dock identification is a highly suggestive procedure. The outcome will be influenced by the witness' willingness to testify, which is known to be influenced by feedback of prior identification and, in my opinion, is likely to be influenced by knowledge of other evidence against the defendant.

References

Abelson, R. P. (1981). Psychological status of the script concept. *American Psychologist, 36,* 715-729.

Aldridge, J. (1994). *CCTV Operational requirements manual.* Publication 17/94 Home Office Police Scientific Development Branch. http://www.3v.pl/pdf/or_manual.pdf

Belli, R. F., Windschitl, P. D., McCarthy, T. T. & Winfrey, S. E. (1992). Detecting memory impairment with a modified test procedure: Manipulating retention interval with centrally presented event items. *Journal of Experimental Psychology: Learning, Memory and Cognition,* 18, 356-367

Brewer, N. (2006). Uses and abuses of eyewitness identification confidence. *Legal and Criminological Psychology*, 11, 3-23.

British Psychological Society (2008). *Guidelines on memory and the law. Recommendations form scientific study of human memory*. Leicester: British Psychological Society.

Bruce, V. (1982). Changing faces: Visual and non-visual coding processes in face recognition. *British Journal of Psychology,* 73, 105-116.

Burton, A. M., Wilson, S., Cowan, M. & Bruce, V. (1999). Face recognition in poor quality video: Evidence from security surveillance. *Psychological Science,* 10, 243-248.

Clark, S. E., Marshall, T. E. & Rosenthal, R. (2009). Lineup administrator influences on eyewitness identification decisions. *Journal of Experimental Psychology: Applied*, 15, 63-75.

Cohen , G & Faulkner , D. (1989). Age differences in source forgetting: Effects on reality monitoring , *Psychology and Aging* , 4 , 10 - 17.

Coxon, P. & Valentine, T. (1997). The effects of age of eyewitnesses on the accuracy and suggestibility of their testimony. *Applied Cognitive Psychology*, 11, 415-430.

Curby, K. M., Glazek, K. & Gauthier, I. (2009). A visual short-term memory advantage for objects of expertise. *Journal of Experimental Psychology: Human Perception and Performance*, 35, 94-107.

Deffenbacher, K. A., Bornstein, B. H., McGorty, E. K. & Penrod, S. D. (2008).Forgetting the once-seen face: estimating the strength of an eyewitness's memory representation. *Journal of Experimental Psychology: Applied*, 14 139-150.

Deffenbacher, K. A., Bornstein, B. H., Penrod, S. D., & McGorty, K. (2004). A meta-analytic review of the effects of high stress on eyewitness memory. *Law and Human Behavior*, 28, 687-706.

Devlin, P. (1976). *Report to the Secretary of State for the Home Department on the Departmental Committee on Evidence of Identification in Criminal Cases,* HC 338, London: HMSO.

Gabbert, F., Memon, A. & Allan, K. (2003). Memory Conformity: Can eyewitnesses influence each other's memories for an event? *Applied Cognitive Psychology*, 17, 533-544.

Graf, P. & Schacter, D. L. (1985). Implicit and explicit memory for new associations in normal and amnesic subjects. *Journal of Experimental Psychology: Learning, Memory & Cognition*, 11, 501-518.

Greathouse, S. M. & Kovera, M. B. (2009). Instruction bias and lineup presentation moderate the effects of administrator knowledge on eyewitness identification. *Law and Human Behavior*, 33, 70-82.

Jacoby, L. L. & Dallas, M. (1981). On the relationship between autobiographical memory and perceptual learning. *Journal of Experimental Psychology: General*, 110, 306-340.

Johnson, M. K. (2006) Memory and reality. *American Psychologist*, 61, 760-771

Johnson, M. K., Hashtroudi, S. & Lindsay, D. S. (1993). Source monitoring. *Psychological Bulletin*, 114, 3 -28.

Kleider, H. M., Pezdek, K., Goldfinger, S. D. & Kirk, A. (2008). Schema-driven source misattribution errors: Remembering the expected from a witnessed event. *Applied Cognitive Psychology*, 22, 1-20.

Lindsay, R. C. L., Semmuler, C., Weber, N., Brewer, N. & Lindsay, M. R. (2008). How variations in distance affect eyewitness reports and identification accuracy. *Law and Human Behavior*, 32, 526-535.

Loftus, E. F. (1977). Shifting human color memory. *Memory & Cognition*, 5, 696-699.

Loftus, E. F. (2003). Make-believe memories. *Scientific American,* 58, 867-873

Loftus, E. F. & Hoffman, H. G. (1989). Misinformation and memory: The creation of new memories. *Journal of Experimental Psychology: General,* 118, 100-104

McAuliff, B. D. & Kovera, M. B. (2007). Estimating the effects of misleading information on witness accuracy: Can experts tell jurors something they don't already know. *Applied Cognitive Psychology,* 21, 849-870.

McKelvie, S. J. Standing, L., St Jean, D. & Law, J. (1993). Gender differences in recognition memory for cars and faces: Evidence for the interest hypothesis. *Bulletin of the Psychonomic Society*, 31, 447-448.

Memon, A., Hope, L., & Bull, R. (2003). Exposure duration: Effects on eyewitness accuracy and confidence. *British Journal of Psychology,* 94*,* 339-354.

Memon, A. & Wright, D. (1999) The search for John Doe 2: Eyewitness Testimony and the Oklahoma Bombing. *The Psychologist*, 12, 292-5.

Morgan, C. A., Hazlett, G., Doran, A., Garrett, S., Hoyt, G., Thomas, P., Baranoski, M., & Southwick, S. M. (2004). Accuracy of eyewitness memory for persons encountered during exposure to highly intense stress. *International Journal of Law and Psychiatry*. 27, 265-279.

Multhaup, K. S., De Leonardis, D. M. & Johnson, M. K. (1999). Source memory and eyewitness testimony in older adults. *Journal of General Psychology,* 126, 74-84.

Police and Criminal Evidence Act (1984) (s.60(1)(a), S60A(1) and s.66(1)) Code D: Code of practice for the identification of persons by police officers. http://police.homeoffice.gov.uk/operational-policing/powers-pace-codes/pace-code-intro/

Pozzulo, J. & Warren, K.L. (2003). Descriptions and identifications of strangers by youth and adult eyewitnesses. *Journal of Applied Psychology*, 88, 2, 315-23.

R v Turnbull and others (1976) 3 All ER 549.

Rudy, L. & Goodman, G. S. (1991). Effects of participation on children's reports: Implications for children's testimony. *Developmental Psychology*, 27, 527-538.

Scottish Home and Health Department (1982). *Guidelines on the conduct of identification parades*.

Semmler, C, Brewer, N., & Wells, G. L. (2004). Effects of postidentification feedback on eyewitness identification and nonidentification confidence. *Journal of Applied Psychology,* 89, 334-346.

Shapiro, P. N. & Penrod, S. D. (1986). Meta-analysis of facial identification. studies. *Psychological Bulletin*, 100, 139-156.

Smith, V. L. & Ellsworth, P. C. (1987). The social psychology of eyewitness accuracy: Misleading questions and communication expertise. *Journal of Applied Psychology*, 72, 294-300

Technical Working Group for Eyewitness Evidence (1999). *Eyewitness Evidence: A Guide to for law enforcement.* US Department of Justice Downloaded 20.1.2008 from http://www.ncjrs.org/nij/eyewitness/tech_working_group.html

Thompson, J. (2000). I was certain but I was wrong. *New York Times*, 18/06/2000. Downloaded 07-04-2010 from http://truthinjustice.org/positive_id.htm

Valentine, T. & Maras, K. (submitted). The effect of cross-examination on the accuracy of adult eyewitness testimony. (Manuscript submitted for publication.)

Valentine, T. & Mesout, J. (2009). Eyewitness identification under stress in the London Dungeon. *Applied Cognitive Psychology,* 23, 151-161.

Valentine, T., Pickering, A. & Darling, S. (2003). Characteristics of eyewitness identification that predict the outcome of real lineups. *Applied Cognitive Psychology,* 17, 969-993.

Wagenaar, W. A. (1986). My memory: A study of autobiographical memory over six years. *Cognitive Psychology,* 18, 225-252.

Wagenaar, W. A. & Van der Schrier, J. (1996). Face recognition as a function of distance and illumination: A practical tool for use in the courtroom. *Psychology, Crime & Law***,** 2, 321-332.

Wells, G. L. & Bradfield, A. L. (1998). "Good you identified the suspect": Feedback to eyewitnesses distort their reports of the witnessing experience. *Journal of Applied Psychology,* 66*,* 688-696.

Wells, G. L., Small, M., Penrod, S., Malpass, R. S. Fulero, S. M. & Brimacombe, C. A. E. (1998). Eyewitness identification procedures: Recommendations for lineups and photospreads. *Law and Human Behavior,* 22*,* 603-647.

Wheeler, M. A., Stuss D, T. & Tulving, E. (1997). Towards a theory of episodic memory: The fontal lobes and autonoetic consciousness. *Psychological Bulletin*, 121, 331-354.

Wright, D. B. & Loftus, E. F. (1998). How misinformation alters memory. *Journal of Experimental Child Psychology*, 71, 155-164.

Wright, D. B. & Mathews, S. A. & Skagerberg, E. M. (2005) Social Recognition Memory: The Effect of Other People's Responses for Previously Seen and Unseen Items. *Journal of Experimental Psychology: Applied*, 11, 200-209.

Wright, D. B. & McDaid, A. T. (1996). Comparing system and estimator variables using data from real lineups. *Applied Cognitive Psychology*, 10, 75-84.

Wright, D. B., Self, G. & Justice, C. (2000). Memory conformity: Exploring misinformation effects when presented by another person. *British Journal of Psychology*, 91, 189-202.

Wright, D. B. & Skagerberg, E. M. (2007). Postidentification feedback affects real eyewitnesses. *Psychological Science*, 18, 172-178.

Wright, D. B. & Stroud, J. (1998). Memory quality and misinformation for peripheral and central objects. *Legal and Criminological Psychology*, 3, 273-286.

Zajac, R. & Hayne, H. (2003). I don't think that's what really happened: The effect of cross-examination on the accuracy of children's reports. *Journal of Experimental Psychology, Applied, 9*, 187-195.

Zajac, R. & Hayne, H. (2006). The negative effect of cross-examination style on questioning on children's accuracy: Older children are not immune. *Applied Cognitive Psychology, 20*, 3-16.

Declaration

I understand that my duty in providing a written report and giving evidence is to help the court, and that this duty overrides any obligation to the party by whom I am engaged. I confirm that I have complied and will continue to comply with my duty. The opinions I have expressed represent my complete and true professional opinion. I have clearly stated any qualification to my opinion.

Professor Tim Valentine
7th April 2010

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Annex A

Professor Tim Valentine
Qualifications and experience.

1. I am a Professor of Psychology at Goldsmiths, University of London. In addition, I am a director of Valentine Moore Associates Ltd, a company that handles my private consultancy work. I have a degree in psychology from the University of Manchester (1982) and a PhD from the University of Nottingham (1986). The title of my doctoral thesis was 'Encoding processes in face recognition'. After 2 years post-doctoral research at the Medical Research Council Applied Psychology Unit in Cambridge, I was appointed to a lectureship at the University of Manchester in 1989. I moved to the University of Durham in 1992 and was appointed to a Chair in Psychology at Goldsmiths in January 1997, where I served as Head of the Psychology Department from 2000-2003. I am a Fellow of the British Psychological Society, a Chartered Psychologist and a Chartered Scientist.
2. I am an author of more than 70 scientific articles, including a single-authored article that introduced a leading theoretical framework for understanding human face recognition – (Valentine, 1991). The majority of my publications are on the psychology of face identification. The distinctiveness (or similarity) of faces has formed a central interest to my research since my doctoral research. This work has included research on the effect of ethnicity on face recognition. I have published research on the use of video identification parades, which was conducted in collaboration with Durham Constabulary and West Yorkshire Police (e.g. Valentine & Heaton, 1999; Valentine, Harris, Colom Piera & Darling, 2003) and have analysed a large sample of live identity parades conducted by the Metropolitan Police (Valentine, Pickering & Darling, 2003). My research has contributed to a change in the code of practice governing the conduct of identity parades (Police and Criminal Evidence Act, code of practice, code D), which has made video

identification the format of choice for formal identification evidence. I was awarded a research grant (£104k) from the Nuffield Foundation for further work on video identification (in collaboration with Professor Amina Memon, University of Aberdeen and West Yorkshire Police). This project benefited from an advisory panel on which both the police and Home Office were represented. As part of this project I organised a workshop on 'Eyewitness Identification Evidence' held in London, February 2006. This meeting was attended by leading psychology and law academics, barristers, police officers and Home Office officials. The Nuffield Foundation has awarded a further grant of £93k in 2006 for a project on street identification procedures. I am the principal investigator on this project, with collaboration from Professor Amina Memon (Psychology , University of Aberdeen) and Dr Andrew Roberts (Law, University of Warwick). The project was carried out in collaboration with the Metropolitan Police, Northumbria Police, West Midlands Police and Hertfordshire Police. From 2002-2005 I supervised a doctoral studentship on identification of faces from CCTV images and facial comparison, which was funded by the Economic and Social Research Council. From 2005-6 I supervised a project to evaluate of the latest generation of software for facial composite production, funded by a £51k grant from the Engineering and Physical Sciences Research Council.

3. I was invited to present my work to the First National Identification Officers conference in 2000 and to the British Association for the Advancement of Science in September 2001. I was an invited discussant for two symposia at the 5th International Conference of the Society for Applied Research on Memory and Cognition (SARMAC), Aberdeen, July 2003 and presented two invited papers at the International Psychology and Law Conference in Edinburgh, July 2003. I presented an invited paper at the 6th International Conference of SARMAC in New Zealand in January 2005, and was invited to convene a symposium on "Psychology and Law" at the 2007 British Psychological Society Annual Conference. I have presented my work to police seminars for VIPER and PROMAT – the two video identification systems in use by UK police forces; a workshop on the National Video Identification Strategy (NVIS), the Metropolitan Police Service

Identification Command and frequently contribute to training for police officers and prosecutors on identification issues. I was the only academic member of The National Identification Forum, a Home Officer advisory group set up to provide advice on identification issues for a Home Office review of the Police and Criminal Evidence Act. I organised a symposium on eyewitness identification presented at the 2nd International Investigative Interviewing Conference held at the University of Portsmouth in July 2006, which included both academic and police speakers. I co-edited a book derived from proceeding of the conference –*The Handbook of the Psychology of Investigative Interviewing* (2009). Tom Williamson, who is an editor of this volume, was formerly Deputy Chief Constable of Nottinghamshire Police and previously a commander in the Metropolitan Police.

4. I have undertaken work as an expert witness on facial identification since 1999. I am listed as a 'checked' expert witness by Sweet and Maxwell's Directory of Expert Witnesses (formerly The Law Society's Directory of Expert Witnesses), and accredited as a practising member of the Academy of Experts. I have been called to give evidence in Court by both defence and prosecution, and have been consulted by West Yorkshire Police on development of video identification procedures.

References

Valentine, T. (1991). A unified account of the effects of distinctiveness, inversion and race in face recognition. *Quarterly Journal of Experimental Psychology*, 43A, 161-204.

Valentine, T. Harris, N., Colom Piera, A. & Darling, S. (2003). Are police video identifications fair to African-Caribbean suspects? *Applied Cognitive Psychology,* **17**, 459-476

Valentine, T. & Heaton, P. (1999). An evaluation of the fairness of police line-ups and video identifications. *Applied Cognitive Psychology,* 13, S59-S72.

Valentine, T., Pickering, A. & Darling, S. (2003). Characteristics of eyewitness identification that predict the outcome of real lineups. *Applied Cognitive Psychology,* 17, 969-993

Bull, R., Valentine, T. & Williamson, T. (2009) *Handbook of the Psychology of Investigative Interviewing* (Chichester: Wiley.)