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"MEMORY MANIPULATION AND CRIMINAL TRIALS"

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ABSTRACT

Human memory is a vital component of the criminal trial where testimony, victim statements and confessions have proven to be causes of wrongful conviction and acquittal. Studies from cognitive psychology and neuroscience indicate that memory is a reconstructive and not recorded process, which means it can be changed and distorted. This paper examines how memory alteration affects the criminal justice system, including the admissibility and evidential value of witness, victim and suspect accounts, procedural due process, and the problem of false conviction.

This paper will explore how memory alteration can take place due to interviewing techniques and investigations. More specifically it will examine how interrogation can distort memory through questions designed to implant suggestions, how misleading information can have an impact on memories through the application of suggestive line ups and how external suggestion, during a police interrogation for example, can cause the witness' account and the memory they are referencing to be flawed. By using a cross-discipline approach involving psychology, neuroscience and legal theory this research highlights that witness confidence may be the result of stimuli other than that originally witnessed.

The traditional view of the credibility of an eyewitness' testimony in a legal system and its conflict with that shown through science and evidence, will be analyzed. An examination of how an expert on the science of memory has been received by the courts, the limitations put in place on interrogations and safeguards applied to identification proceedings and standards placed on eyewitness evidence all demonstrate how existing protections are not enough to combat the fallibility of memory when applied with a significant reliance upon the reliability of an eyewitness to events.

The article will also discuss the reforms introduced in certain jurisdictions in contrast with the traditional view of eyewitness testimony within the criminal justice system. Specifically the impact of changes such as the reform of identification procedures and recording of interrogations and the addition of jury instructions regarding the process of remembering will be assessed. All of this is to determine the impact of scientific evidence within the criminal justice system and to provide models for future reform.

In conclusion, for the criminal justice system to ensure a fair trial based on accuracy, the fallibility of human memory must be taken into account. By adhering to research in the relevant sciences and implementing scientific findings within the criminal justice system the number of false convictions can be decreased while promoting the accuracy and validity of procedures and processes. The nexus

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between memory science and the criminal justice system offer's promising areas for additional legal reform and scholarly research.

INTRODUCTION

Eyewitness testimony has been afforded an elevated status throughout the course of criminal trials, regarded generally as firsthand and incisive proof of what happened in the past. Investigators, the courts and the jury have historically afforded eyewitness evidence an inherent persuasiveness because it seems to be able to provide direct evidence of events. However, over the course of time evidence has begun to grow about how fallible human perception and memory really are, and what people think they saw often has very little resemblance to reality. These inaccuracies are not normally the result of lying; rather they stem from the myriad psychological processes that have influence over our perception of stimuli, the way that the stimulus is encoded, stored and then recalled at a later date.

There are numerous internal and external factors, which have an impact on the reliability of eyewitness testimony both pre-incident, during the event and post-incident. Situational and environmental factors such as stress, weapon focus, low lighting conditions, time exposure to stimuli, cross racial identification and the number of offenders, can effect perception at the time of the event and in turn influence eyewitness recall. This recall can then be further manipulated post-incident through leading questions, media reporting, information provided from other witnesses and by misleading identification procedures. These influences can therefore render the eyewitness accounts not only liable to unintentional inaccuracies, but also prone to re-construction and confidence inflation over time.

The continued acceptance of eyewitness evidence as reliable testimony by courts of law results in a conflict between current evidentiary practice and contemporary scientific understanding. It is apparent that witnesses may be judged on their confidence, or demeanour, neither of which are necessarily accurate indicators of truthfulness. This chapter analyses the psychological underpinnings of eyewitness testimony, explores those situational and procedural factors which place eyewitness evidence at risk, and discusses how the courts face a challenge when evaluating evidence provided by witnesses, illustrating the strong need for careful evaluation of testimony.

Among the gravest errors the legal system is capable of producing is wrongful conviction. A wrong conviction not only inflicts tremendous harm upon the individual and their family, but it also serves to erode societal belief in the justice of the system. Many wrongful convictions today result from the effects of false memories, an area of psychology for which there is increasing evidence as a cause of such miscarriage. While most people may intuitively assume that memories function like a recording machine of past events, psychological studies have confirmed the malleability and construction of memories through the use of suggestion, misleading questioning, and social interaction.

CHAPTER II

EYEWITNESS TESTIMONY: RELIABILITY AND VULNERABILITY

2.1 Introduction

Empirical research has demonstrated conclusively that identification of the defendant by an eyewitness is the single most potent variable for conviction and will be the single most likely form of evidence to overcome apparently contrary alibi testimony, circumstantial evidence or inculpatory scientific evidence. Ironically the same research has demonstrated equally conclusively that eyewitness testimony is also among the least reliable forms of evidence and is extremely vulnerable to a multitude of cognitive, perceptual and social variables which can convert what the eyewitness is quite certain of, to a completely false conclusion.

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This chapter covers the psychological basis of eyewitness testimony, discusses some of the variables which influence eyewitness reliability, the treatment of eyewitness identifications in the Indian legal system and some others and discusses the reforms made and proposed to minimise the risks posed by eyewitness error.

2.2 The Psychology of Eyewitness Identification

Eyewitness identification is a complicated cognitive process that requires three separate stages to occur successfully: perception of the perpetrator, retention of that perception over time, and retrieval of that perception through photographic/live lineup or courtroom testimony. Factors contributing to error exist at each stage of this process. Failures to recall correctly can occur at any point during these three stages, and error at any stage can lead to a misidentification.

At the perception stage, the accuracy of the observation is influenced by several factors, such as how long the perpetrator was visible, how far away from the witness the perpetrator was, light quality, the presence of a weapon, the level of witness stress, whether the witness looked at the perpetrator's face or something else, etc. In general, an event that is brief, stressful, and observed under poor conditions will likely create an unreliable perceptual memory.

At the retention stage, memory fades and becomes distorted just as is described with regards to memory as a process at Chapter I. If time is prolonged between the initial event and the identification procedure, a distorted or weakened memory is likely to result. At the retrieval stage, the procedure of the identification procedure itself is crucial. Inaccuracies occur when witnesses are shown single suspects (show-ups), when lineups are rigged, when police administer line-ups without being blind to which subject is the suspect, and when pre-identification confidence levels of witnesses are not recorded.

2.3 Estimator Variables and System Variables

Gary Wells's landmark distinction between 'estimator variables' and 'system variables' offers a crucial theoretical and practical approach to an understanding of eyewitness error and its legal implications. Estimator variables: These are features of the crime situation and the witness that were present at the time of the offense and are not manipulable by the criminal justice system following the event. Examples of estimator variables are: the lighting at the scene of the crime, the witness-perpetrator distance, the duration of the event, the level of witness stress, the presence of a weapon, and the witness's race relative to the offender's race. Although estimator variables are unalterable, their probable impact on eyewitness testimony can be judged and reported on by expert witnesses, permitting a more informed assignment of weight to eyewitness testimony.

System variables: These features of the investigative and identification process are controlled by the criminal justice system. They are features that could be changed to improve the accuracy of eyewitness identification evidence. Examples are: instructions to witnesses prior to lineup, composition and presentation of the lineup itself, manner of lineup presentation (blind vs. Non-blind; sequential vs. Simultaneous), witness's post-identification confidence assessment, and identification of a previously seen filler rather than the perpetrator.

2.4 Common Causes of Eyewitness Error

Many factors contributing to eyewitness fallibility have been identified:

The weapon focus effect: When a weapon is present, witness attention is primarily on the weapon rather than the perpetrator's face. This effect has been repeatedly demonstrated in lab and field settings and contributes to lower identification accuracy of perpetrator faces.

The other-race effect: Witness identification accuracy for members of one's own race

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significantly exceeds accuracy for members of other races. The other race effect, or cross-race effect, is reliably robust, replicated across numerous studies, and due to differences in prior experience with own-race and other-race faces.

Stress and arousal: While optimal attention and encoding is likely achieved with moderate arousal, high levels of stress-what one expects during violent crimes for victims and bystanders alike-are negatively correlated with encoding of certain memory attributes, including those details that might be useful in facial identification. The relationship between stress and memory is not linear.

Unconscious transference: This phenomenon is defined as the mistaken identification of an innocent person seen in a prior context. If a witness has encountered an innocent bystander in a situation related to the crime, that bystander's face might become confused with the perpetrator's, resulting in an inaccurate identification of the bystander as the criminal.

Post-event misinformation: The misinformation effect occurs when witnessing information is altered by post-event exposure to new, and often false information in leading questions, media accounts, discussions with witnesses, or police feedback. The misinformation effect is most potent when information originates from an authority such as a police officer.

Confidence inflation: An even more insidious source of error in eyewitness identification results from confidence inflation as a result of investigator confirmation ("That's the guy"). Gary Wells and Elizabeth Olson provide extensive evidence that, after receiving confirming feedback post-identification, witnesses increase the certainty of their identification, irrespective of whether that identification was accurate or not. Courts are especially likely to consider witness confidence to be a correlate of accuracy, an association that is only weakly present in fact.

2.5 Eyewitness Identification in India: Legal Framework and Practice

Accused person identification in India is to a great extent guided by the Code of Criminal Procedure, 1973 (CrPC) and Indian Evidence Act, 1872 (IEA). As per Section 9 of the IEA, "facts necessary to explain or introduce a fact in issue or relevant fact…or to make that fact intelligible and its relation thereto, may be proved". Section 9 may, and does, extend to cover evidence of identity. Identification (or Test Identification, or TIP) parades form the "chief formal method" by which witnesses identify accused persons in India.

The procedure for the conduct of an identification parade and evidence procured therein is one that is largely dictated by judicial interpretation, there being very little guidance by statute on this issue. It has time and again been held by the Supreme Court that, " whenever it is practicable… An identification parade must be conducted by a judicial magistrate, involve independent witnesses and preclude the witness from seeing the accused beforehand." The Supreme Court has held that in cases of disputed identification, "there need not necessarily be an identification parade although dock identification is of very minimal evidentiary value".

Notwithstanding the broad guidelines above, a wide variety of shortcomings plague the procedure and systemic framework of identification parades in India. These include the lack of a standardized method for compiling a lineup, the failure to hold an identification parade by police officers not investigating the case, a failure to record the degree of certainty by the witness in the identification parade, and a failure to demand an electronic recording of the identification parade.

CONCLUSION

The very nature of Eyewitness Testimony, and the construction of False Memory in particular, demonstrates the profound difference between commonly accepted assumptions regarding

testimonial evidence and actual knowledge gleaned from the psychological research of human memory. Eyewitness testimony has been accepted by the criminal justice system for quite some time now and has truly been regarded as irrefutable evidence of crimes committed. Yet, it is not possible to see human memory as a completely perfect and exact reconstruction of an event from initial observation through court testimony, due to its fluid and malleable nature at every stage of remembering. In Eyewitness Testimony it is no longer plausible to maintain that a witness is truthful when reporting an event just because he or she remembers the event clearly.

The presentation ofEyewitness Testimony reveals many situation and process related factors that have negative impacts upon eyewitnesses recall and that can have even more significant detrimental impact depending upon post-event factors such as media exposure, post-event discussion with fellow witnesses, and repeated interrogations; therefore, although a witness might appear honest and convincing in the courtroom, it will not only be inaccurate but it will also likely be incomplete.

The construction of false memory portrays an even greater level of weakness for Eyewitness Testimony. Reconstruction is not only possible for slight details of an event, it is also possible to construct entire events from misinformation provided socially or environmentaly, which the participant believes he or she has witnessed. If testimony has not actually been witnessed by the participant then perhaps we can still regard Eyewitness testimony and Eyewitness confessions as trustworthy in courtrooms, because no doubt when the participant believes he or she has witnessed an event, they actually believe they are reporting the truth of how an event happened, even if it is not a truth recognized in the legal system. Since false memory is responsible for a substantial number of cases of miscarriage of justice in criminal proceedings; it appears these influential factors may warrant consideration regarding the nature of many contemporary court procedures involving eyewitness testimony and confessions in court rooms, such as the proper methods of eyewitness identification, and interrogation, use of expert witness testimony to present the limitations of human memory to juries, as well as detailed and clear jury instructions regarding eyewitness testimony and the law, so as to not jeopardize the legal system further, because in essence, it is only through acknowledging the untrustworthy nature of testimonial evidence that we can hope to support it and protect it in the legal system.

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