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## Judicial interpretation of forensic evidence in criminal justice delivery system in India

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### Abstract

This paper will look into the disciplinary and legal framework in relation to the use and application of forensic science in the criminal justice system. In addition, it will attempt to investigate the reasons behind the relatively early stage of forensic science's involvement in Indian criminal justice administration, despite significant technical advancements over the past several years that have brought our society closer to a higher level of scientific sophistication. In order to deliver prompt justice and remedies to victims of horrific crimes, the Indian judicial system must be reshaped and altered to make use of forensic investigations and trials that are focused on achieving certain goals. The thesis is restricted to these subjects and does not address computational or cyber forensics. Instead, it focuses on the application of forensic science and the study of forensic entomology, forensic DNA analysis, forensic chemistry, bloodstain pattern analysis, and forensic art. As seen in the past ten years, there have been notable changes in crime investigation procedures in light of technology advancements brought about by the advancements in the criminal justice system. Establishing a critical connection between the crime and the accused criminals is facilitated by police officials' use of scientific tools and procedures in crime detection. These tangible proofs are trustworthy in ascertaining the veracity of the accused criminal's or offender's innocence or guilt.

**Keywords:** Criminal, cyber forensics, accused, DNA analysis

### Introduction

The realm of crime is very old, and it has developed with human consciousness. Generally speaking, when humans began to live in societies, needs were created as humanity evolved. A list of dos and don'ts was established for the populace in order to grant equality of rights and respect from society. It was noted and assessed that everyone in the society complied with the established boundaries of behavior; in the event that someone did not, the appropriate sanctions were applied to keep the community free from evil. As a result, this idea developed into the process of looking into crimes and discovering how they were handled, which eventually helped establish the framework for numerous institutions that deal with trials and investigations in order to fairly administer justice to all. Numerous delivery methods rely on assessing the veracity of the victim's statements to determine if they are speaking the truth or are making false accusations out of malice. In contrast, the 'eyewitness' testimony was deemed crucial prior to the sentencing of any offenders. However, it was found that in many instances, the eyewitnesses were ineffective when they were coerced into making false statements or denying anything in response to threats to their lives or the promise of money. As a result, the eyewitness credibility was called into question and could not be fully trusted before judging a person guilty. Furthermore, in an attempt to get the truth from the criminals, the crime detectives subsequently turned to "third degree methods." However, because of shifting cultural norms and values, it was viewed as harsh, and innocent individuals frequently had to deal with unintentional repercussions and irreversible losses. As time went on, scientific research and technology advancements led to the use of contemporary scientific techniques in criminal investigations. These approaches helped solve cases quickly and reliably, and the field was dubbed "forensic science."<sup>1</sup>

### Research problem

The criminal justice system is a collection of laws designed to protect the rights of both individuals and social groups. The governing body frames it in such a way as to guarantee that justice is supplied to the communities through upholding law and order in the social and

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<sup>[1]</sup> D.C.Dirksmaat, L.L.Cabo, *et al.*,—New perspectives in forensic anthropology 1137(S47) *American Journal of Physical Anthropology: The Official Publication of the American Association of Physical Anthropologists* 33-52 (2008)

economic spheres. The scientific method of looking into the matter and gathering proof against the accused is called forensic evidence collection. In order to solve the criminal cases, it uses a variety of scientific and technological approaches, including DNA profiling, computer science, and engineering. However, the forensic evidence is rarely employed extensively in the criminal justice system because of constraints in the Indian legal system. The primary concern with the use of forensic investigation evidence is the veracity of the information. The majority of samples that the investigating officer takes from the scene of the crime are tainted and yield unreliable results. Second, the detectives who are gathering samples from the crime scene lack expertise and do not gather the samples in the right way. Thirdly, there is a delay by the investigating officer in transferring the sample to the laboratories, which destroys the sample before important data could be taken from it. This destroys the crucial evidence and lessens its applicability during the court trial. Fourthly, there is uncertainty over the administration and standardization of laboratories in India, which makes it difficult to incorporate the findings that are submitted into the jurisdiction process. Since police departments oversee the majority of laboratories, the reports supplied by the laboratories are not verified by Indian courts. The use of forensic evidence in court processes and trial procedures is adversely affected by all of these. As a result, changes must be made to the criminal justice system to improve the court's ability to use forensic evidence. To improve the legitimacy of the evidence, it also entails creating a distinct structure for the laboratories and testing of crime samples [2].

### Research questions

- What does the term "criminalistics" mean?
- What is forensic evidence's function and significance?

### AIM and Objectives of study

1. To comprehend the idea of forensic science and criminalistics
2. To assess the function and significance of forensic evidence.

### Research Methodology

The research is mostly analytical in nature, and doctrinal technique has been used. As the research's title suggests, the study was only made possible by the analytical examination of a small number of cases and the observations made by the Honorable Supreme Court and the Honorable High Court in chronological order. It also evaluated and explored the benefits and drawbacks of the criminal justice system's reliance on forensic evidence by incorporating thought-provoking ideas. Also examined were landmark instances that altered the legal framework governing the admission or rejection of forensic evidence in court. Even so, case law is distinct from statute law, but when combined with statute law can occasionally be regarded as the main source of law, particularly in cases where the Supreme Court renders judgments. Interpreting statutes is a fundamental component of the common law system, and case law research is a crucial step in the legal research process. A law known as case law is

derived from the public rulings of judges in cases that they preside over. The pertinent case facts and the applicable legal reasoning are laid out by the judges in their rulings. There is a hierarchy of authority in decisions under common law. Judges' reported decisions constitute a significant portion of the law since those rendered by higher courts set precedents that lower courts must abide by.

### Discussion

#### Judicial approach

The Indian Supreme Court further clarified the definition of "expert" in the case of *State of Himanchal Pradesh v. Jai Lal and Ors* [3], noting that "An expert witness is one who has made the subject upon which he speaks a matter of particular study, practice, or observation: and he must have a special knowledge of the subject [4]". The Indian Evidence Act, 1872 defines "expert".

To obtain the correct legal meaning of the term "expert," however, we must refer to a seminal ruling from a Canadian court. In the Canadian case *Davie v. The Lord Provost, Magistrates and Councilors of the City of Edinburgh* [5], Lord President Cooper outlined the parameters of scientific expertise. Specifically, he pointed out that:

It is the experts' responsibility to provide the judge or jury with the scientific standards required to verify the veracity of their conclusions. This will allow the jury or judge to make an independent decision by applying the standards to the facts presented in evidence [6].

In keeping with this line of reasoning, the Indian Apex Court has expressed doubts about the admissibility of scientific evidence because it is essentially the opinion of an expert. In the highly complex case of *Anant Chintaman Lago v. State of Bombay* [7] a plethora of medical evidence obtained through the victim's pre- and post-death medical examinations was presented to the court by both the accused and the prosecution. In the current case, a crucial point came up: what would happen if there was further circumstantial evidence supporting the medical opinion that the poisoning did not cause death? After providing a negative response, Justice Hidayatullah noted that

"The benefit of the doubt will have to be given to the accused person if the evidence (of the Expert Witness) in a particular case does not justify the inference that death is the result of poisoning because the prosecution has not satisfactorily proven the fact, either directly or by circumstantial evidence" [8]. Their Lordship also noted, "But if circumstantial evidence, in the absence of direct proof of the three elements, is so decisive that the Court can unhesitatingly hold that death was a result of administration of poison (though not detected) and that the poison must have been administered by the accused person, then the conviction can be rested on it [9]. The statement stressed the admissibility of circumstantial evidence in cases where it is beyond a reasonable doubt.

Justice Hidayatullah made a crucial statement when he highlighted the conflict between the medical expert's testimony and ordinary evidence and the outcome of relying solely on scientific evidence (in this case, medical evidence)

<sup>3</sup> (1999) 7 SCC 280.

<sup>4</sup> Id., para 13.

<sup>5</sup> *Davie v. Edinburgh Magistrate* [1953] S.C. 34, 40. (Canada).

<sup>6</sup> Id., Emphasis in Italics supplied by the researcher.

<sup>7</sup> AIR 1960 SC 500.

<sup>8</sup> Id., at 506

<sup>9</sup> Id., at 507

<sup>2</sup> S.K.Shali, *Applicability of Forensic Science in Criminal Justice System in India With Special Emphasis on Crime Scene Investigation* (Medico-Legal Desire Media and Publications, 2018).

in cases where other non-scientific evidence pointed to a contrary inference. He said, "To rely upon the findings of the medical man who conducted the postmortem and of the chemical analyzer as decisive of the matter is to render the other evidence entirely fruitless." Even while the facts frequently speak for themselves with absolute certainty, the autopsy and chemical analysis by themselves could be the most deceptive. Without a doubt, the negative results of these kinds of tests must be given the proper weight. However, given the challenging work that physicians undertake and the constraints that surround their practice, their failure should not be interpreted as the conclusion of the matter because, with sufficient evidence, an unavoidable inference of guilt can be made <sup>[10]</sup>. It is argued that the matrix of Justice Hidayatullah's observations in the current case applies to the testimony of experts in various domains, such as engineering, metallurgy, mechanical, electrical, and electronics.

Again regarding the admissibility of expert testimony, the Supreme Court of India has established in the case of Sarwan Singh and Others etc. v. State of Punjab <sup>[11]</sup> that while expert testimony may serve as a guide and point the court in the right direction, it is not legally binding and the court will admit it based on the specific facts and circumstances of each case. The Apex Court ruled in this particular case that the doctor's expert witness opinion regarding the nature of the injuries is not legally enforceable. The doctor said that the injuries were sufficient in the normal order of things to result in death, but the court didn't think so. The court noted that, absent the assistance of a medical expert, an accused person shall be found guilty of an offence under Section 302 of the Indian Penal Code if the accused is found to have caused injuries to the deceased that would have been sufficient in the regular course of nature to cause death. The Apex Court explained why it disregarded the expert's testimony in this case by noting that, in the event that the cumulative injuries were severe enough to result in death, it would be necessary to determine the unlawful assembly's common object before finding each accused person guilty under Section 302 read with Section 149. Alternatively, it would be necessary to determine whether each member of the unlawful assembly knew that the injuries were likely to result in death, which would be punishable under Section 302 of the IPC, and that all of this had been done in the prosecution of the common object <sup>[12]</sup>.

### Judicial attitude on admissibility of expert opinion

"The value of such evidence (Expert Opinion) depends upon the authority, experience and qualifications of the expert and above all upon the extent to which his evidence carries conviction, and not upon the possibility of producing a second person to echo the sentiments of the first, usually by a formal concurrence," as held by Lord President Cooper in one of Canada's most well-known cases, *Davie v. The Lord Provost, Magistrates and Councilors of the City of Edinburgh* <sup>[13]</sup>.

"The opinion expressed by an expert witness in any branch of technical science depends for its effect on, inter alia, his qualifications, skill and experience in that science," said Lord Russell, who concurred with the views of the Lord President in the same case. A Court is entitled, though not required, to accept it even in the absence of any supporting expert opinion

if it appears to be based on adequate research that is accurately and pertinently directed to a particular issue and to be sufficiently supported to persuade a Court of its fundamental soundness and applicability to the particular issue <sup>[14]</sup>.

The Court of Appeals of New South Wales (Australia) made the following observations in *Makita (Australia) Pty Ltd v. Sprowles* <sup>[15]</sup>:

"In short, if evidence tendered as expert opinion evidence is to be admissible, it must be agreed or demonstrated that there is a field of "specialized knowledge"; there must be an identified aspect of that field in which the witness demonstrates that by reason of specified training, study or experience, the witness has become an expert; the opinion proffered must be "wholly or substantially based on facts "observed" by the expert, they must be identified and admissibly proved by the expert, and so far as opinion is based on "assumed" or "accepted" facts, they must be identified and proved in some other way; it must be established the facts on which opinion is based form a proper foundation for it; and the opinion of an expert requires demonstration or examination of the scientific or other intellectual basis of the conclusions reached: that is, the expert's evidence must explain how the field of 'specialized knowledge' in which the witness is expert by reason of "training, study or experience" and on which the opinion is "wholly and substantially based" applies to the facts assumed or observed so as to produce the opinion propounded."

Following suit and highlighting the prerequisites that must be met for someone to be called as a witness, the Indian Supreme Court noted in *State of Himanchal Pradesh v. Jai Lal and Ors* <sup>[16]</sup> that an expert witness is someone who has made the subject of their testimony a matter of specific study, practice, or observation. In addition, he needs to be very knowledgeable about the topic on which he is expressing an opinion <sup>[17]</sup>.

*Tomaso Bruno v. State of U.P.* <sup>[18]</sup> noted the following:

The courts are not always directed by the expert report, particularly if it is flimsy and unsupported. Generally, the courts would see expert testimony with a greater degree of acceptability. Though such a report is not definitive, the main goal of an expert opinion is to help the court reach a decision. The report is likely to be examined by the court, which will then combine it with the other evidence in the case to determine whether or not it can be relied upon.

In a significant ruling in *Ramesh Chandra Aggrawala v. Regency Hospitals* <sup>[19]</sup>, the court clarified the circumstances under which the court needs an expert opinion:

"The purpose of the evidence legislation is to guarantee that the court only takes into account the evidence necessary for it to get to a dependable decision. The necessity of hearing expert testimony is the primary prerequisite for the admissibility of expert testimony. The standard is that the subject is outside the realm of lay knowledge and experience. It is also believed that the court is not knowledgeable about the scientific question at hand. Therefore, in situations when the science at issue is extremely specialized, possibly even esoteric, the central norm of expert opinion cannot be

<sup>14</sup> Id. Emphasis in Italics supplied by the researcher.

<sup>15</sup> [2001] NSWCA 305.

<sup>16</sup> . (1999) 7 SCC 280.

<sup>17</sup> . Id., at Para 13.

<sup>18</sup> (2015)ssc7 8 15

<sup>19</sup> AIR 2010 SC 806.

<sup>10</sup> Id., Emphasis in Italics added by the researcher.

<sup>11</sup> AIR 1978 SC 1525.

<sup>12</sup> Id. Emphasis in italics supplied by the researcher.

<sup>13</sup> . [1953] S.C. 34 (Canada) Supra 7.

contested. Additional prerequisites for the admissibility of expert testimony include the following: (i) the expert's membership in a recognized field of knowledge; (ii) the evidence's foundation in trustworthy principles; and (iii) the expert's qualification in that field<sup>[20]</sup>.

The court held in *Prem Sagar Manocha v. State (NCT of Delhi)*<sup>[21]</sup> that an expert's obligation is to provide the court with his opinion, the basis for it, and all supporting documentation. The court must then determine if the opinion's foundation is legitimate and valid before coming to its own judgment. The expert offers his assessment of what he has examined or what has undergone inspection. The conclusion that follows is still merely his opinion based on what he knows. If, later on, he reads some reliable material that seems to support a different viewpoint, he has to address it or risk being labeled as intellectually dishonest, impartiality and receptivity to the truth, regardless of one's personal beliefs.

### Conclusion

The goal of the criminal justice system, according to the theory as a whole, is to provide victims with justice and equity while assisting in the prosecution of offenders through legal means. The criminal justice framework's goals are to deter crime with the aid of the law and other authorities who aid in providing convicts with justice and correction. The criminal justice system's key institutions include the police, courts, jails, arraignments, and legal counsel. Government facilities and organizations operate as a series inside the criminal justice framework. Moreover, surveys reveal that the criminal justice system comprises a diverse range of professionals, including police, judges, attorneys, lawmakers, paraprofessionals, and others. All positions in the criminal justice framework division are final postings. Confronting behavior, self-control, and rehabilitation are crucial components of any criminal justice system. Although the designs of criminal justice systems across the globe varies, the goals of the framework are the same in all of them. In India<sup>[22]</sup>, police are crucial to the precise and concentrated implementation of the criminal justice delivery system (Mack & Chatterjee, 2021). The police division takes lawful, quick action to shield victims primarily from crimes. Police take proactive measures to deter lawbreakers or acts of barbarism. By obtaining a warrant, Indian criminal law empowers police to apprehend those who have been reported. It has also been summed up as follows: in order to maintain Indian law and control over the equity and justice framework, police must conduct a fair investigation and gather all evidence from the crime scene and the offender. Since police examination forms the basis of the criminal justice system, it is often significant. To move on with a fair assessment procedure and a definitive equity, police play a crucial role. Due to corruption and a shortage of qualified personnel in this field, India's police examination system is deficient. The Indian police framework must be updated in order to better serve the requirements of society and make Indian law and the criminal justice system more effective.

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<sup>20</sup> . Id., at Para 11.

<sup>21</sup> . AIR 2016 SC 290.

<sup>22</sup> M. S. Mack and I. Chatterjee, -Role of Forensic Evidence in Criminal Justice Delivery System in India 8(4) *Natural Volatiles & Essential Oils Journal* 5765-5770 (2021).