

DEVELOPMENT OF FORENSIC SCIENCE AND CRIMINAL PROSECUTION IN INDIA

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HISTORY

The early times lacked uniform methods of forensic practices. The older method of criminal investigation implied confessions which were not voluntarily but were one which were forced to confess. This practice of forcing to confess gave birth to unlawful practices as use of force to makes someone to confess is not lawful. The concept of forensics is not new in India though its usage in solving crimes is comparatively very low as to developed countries.

Sir William Herschel an officer in Indian civil services during pre-independence was the foremost who advocated in favor of using finger-prints in identification of crime suspects. During 1858 he was the one who started to use thumbprints for securing the measures to avoid the frauds. Following this in year 1977 he initialized using the finger prints in lawful contracts and other legally enforceable deeds in order to avoid the frauds. The basic aim for the same was to avoid the fraud then caused by the relatives in drawing pensioner's money fraudulently during their lifetime or continues drawing money after their deaths. He started to take and preserve the finger-prints of the prisoners so as to put a check on their escape and to prevent any possible frauds¹.

Approximately 20 years later to this in 1897 Kolkata witnessed the establishment of finger-print bureau which was result of the approval of a committee report by council of Governor General. The reports contained the proposal of classifying the criminal records on the basis of finger-prints. Sir Edward Richard Henry was the first scientist to devise a systematized finger-print system which was later co-devised by Azizul Hague and Hem Chandra Bose. England and Wales were among the first to accept this co-devised system. The system is known as Henry Classification System named after Sir Henry who primary devised this system. On the other hand, Scotland witnessed the establishment of first finger-print bureau in Britain².

After independence in 1968 the government of India through the ministry of home affairs established the first forensic science laboratory of free India in Delhi in assisting Delhi police and central bureau of investigation which were left under the control of central bureau of

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¹ Herschel, William James (November 25, 1880). Skin Furrows of the hand. *Nature* 23(578):76

² Sodhi J.S.; Kaur, asjeed (2005). —The Forgotten Indian Pioneers Of Fingerprint Sciencel. *Current Science* 88 (1): 185-191.

investigation. At present this oldest forensic science laboratory of free India provides expert opinions in crime related cases. Its assistance is not only limited to Delhi police and CBI but also extends to State Forensic Science Laboratories, Defense Forces, Government Undertakings, Universities, and Banks etc. In 19th century a startling discovery was made which supported the positive advocacy of using finger-prints in certain criminal matters that was finger contains its own oily substance. The fingers whenever comes in contact with any surface lefts an impression so called latent mark that could be traced by using various methods(e.g., using of fine power over such surface where one is suspected to find the finger-print). Not long after this, in 1894 while moving towards the end of the century Home Secretary in England established a committee called the Troup Committee. The main aim for the establishment of this committee was to determine the best way of personal identification. The committee accepted the fact that no two individual could have same finger-print that is, finger-prints make two individual different. Although, still much reliance were not paid to this findings until 1900 when Argentine court first accepted the finger-print evidence in determining the case. Following this England adopted such finger-print evidence in 1902, which encouraged other countries also to use this type of evidence³. British government before independence gifted India several such laboratories which forms the base of Indian forensic system today.

Anthropometric Bureau (1892), Finger Print Bureau (1897), Inspectorate of Explosives (1898), Office of Government Handwriting Expert (1904), Serology Department (1910), Foot Print Section (1915), Note Forgery Section (1917), Ballistics Laboratory (1930) and Scientific Section (1936). Having subsequently undergone clubbing / regrouping / spreading, as of now, there are 28 State / Union Territory Forensic Science Laboratories (State / UT FSLs) along with their Regional FSLs (32 RFSLs) and Mobile FSLs (144 MFSLs); they are mostly with the respective Home Department either directly or through police establishment⁴.

Present day:

Various prominent jurists in older and present era has made an attempt to define the crime in some of the best possible way they could, some of such definitions are as:-

- In his 'Commentaries on Law of England', Sir William Blackstone defined Crime as "an act committed or omitted in violation of Public Law forbidding or commanding it".

³ <http://www.britannica.com/EBchecked/topic/142953/crime/53437/The-role-of-forensic-science>

⁴ Dr. Gopal Ji. Misra & Dr. C. Damodaran, —Perspective Plan For Indian Forensics, Final Report presented to the Ministry of Home Affairs Government of India, New Delhi

- Sir James Stephen defined, “Crime is an act forbidden by law and revolting to the moral sentiments of the society”.
- Kenny defined “Crimes are wrongs whose sanction is punitive and in no way remissible by a private person, but is remissible by the Crown alone, if remissible at all.”

Thus, DNA analysis is just like identifying the individual's characteristics. Where characteristics, nature, behavior, likes, dislikes of two individual do not match in the same DNA of each individual differ from other individual in one or the other form. The DNA analysis thus, is also called DNA finger-print. There is no doubt that the sciences has given many tools to us for analyzing the forensic evidences and determine the fate of the case. It would not be incorrect to state that the most powerful among them is DNA analysis, the material responsible for making the genetic code of each and every individual. DNA finger-print or DNA typing or DNA profiling analyses the DNA from the physical evidence and match it with the blood, hair etc of the person, if those two matches exactly to each other that simply means that the person was either involved, present, assisting in any criminal or civil issue. The DNA analysis is of great use not only in criminal but also in civil cases.

In simple words it would not be wrong to say that it is modern way to investigate the case whether civil or criminal, the technique have ability to give answers to those questions which could not be answered through ordinary way of investigation. It not only helps to deliver more precise judgments but its merits also include that there could be narrower or we could say that no change of the wrongdoer to escape through any way. The case starts with the investigation of the case; the experts collect the material evidences. Each of such evidences are so unique in their own way that their arise the need to examine them and analyze them separately. Sometimes, cases are so complex that the evidences so collected needs more than one expert to analyze those collected evidences.

At present more than 30 million cases are still pending in the courts of India. Not only the courts are overburdened but also the justice is delayed to those who every day waits for it. With the help of forensics we not only help the victims but also the court to speed-up the justice system and to reduce the burden over-lying them.

Sub-divisions:

- a) **Forensic accounting** is a method of using accounting skills for investigating crime combined with analyzing the financial condition with the aim to use this in legal proceedings.
- b) **Forensic aerial photography** also called as forensic imaging is the recreation of crime scene in front of investigators and analyzers through photographs in order to carefully scrutinize it. This aids the investigation as well as its regarded as evidence which could be produced in court.
- c) **Computational forensics** this branch of forensics is concerned with algorithms development and software development to assist in forensic examination.
- d) **Criminalistics** amalgamation of various sciences in order to compare and examine Biological evidences, Ballistic evidences, Finger-prints etc. these evidences are scrutinized and processed in lab to reach a result which either correlates it to the wrong done or otherwise.
- e) **Forensic dactloscopy** is a science of studying, analyzing finger-prints.
- f) **Digital forensics** is a science to recover the data from electronic and digital media (e.g., search history of a particular computer used by the accused).
- g) **Forensic document examination** is the forensic examination of the disputed document. The most common and known under this category is handwriting examination. Handwriting examination is the one where examiner address concerns in relation to a particular authorship.

RESEARCH QUESTION

The main objective of this paper is to trace and understand the evolution of forensics in India and to explain its meaning. The paper contains a genuine effort to explain how this branch of science known as forensics became an un-severable and important limb of justice delivery system.

ANALYSIS

Forensics is a science with the aim to answer the questions of legal importance. Forensics aims to interpret the evidences of crime scene, with the objective to use the same in investigation. People from various academic background such as chemistry, life-sciences, law

enforcement contribute to this field as forensic scientists or technicians⁵. NABL (National Accreditation Board for Testing and Calibration Laboratories) enshrines four objectives defining the purpose and nature of the program.

- To improve the quality of laboratory services provided to criminal justice system.
- To develop and maintain criteria which can be used by a laboratory to assess its level of performance and to strengthen its operations.
- To provide an independent, impartial and objective system by which laboratories can be benefited through a total operational review.
- To offer to the general public and users of the laboratory services a means of identifying those laboratories which have demonstrated that they meet established standards⁶.

International forensic science (organization), forensic laboratories etc are those which are legally identifiable. The forensic science laboratories must meet the accreditation requirements. Field works are also covered under the work ambit of these laboratories. The labs must ensure the following standards:

- The laboratory does not engage in any activities that might diminish trust in its competence, impartiality, judgment or operational integrity, and
- The laboratory personnel are free from commercial, financial or any other pressure that might adversely affect the quality of their work⁷.

Forensic science and other statutes:

Civil and criminal cases in India are guided by the same law of evidence, though the degree of proof differs in both the cases. But as far as mode of presenting such evidence is concerned the mode remains the same in criminal as well as in civil cases. As per the Indian practice the expert opinion as to a particular matter is only admitted when such expert gives the evidence orally and administer oath in regard to his findings. The following are the exception to this rule:

- When evidence has already been admitted in a lower court;
- Expert opinions expressed in a treatise
- Evidence given in a previous judicial proceeding;

⁵ Sir Krishna, *Forensic Science*, Symbiosis Law School, Pune, India, <http://www.legalservicesindia.com/article/article/forensic-science-601-1.html>, visited on 14/11/2014.

⁶ NATIONAL ACCREDITATION BOARD FOR TESTING AND CALIBRATION LABORATORIES, specific guidelines for accreditation of forensic science laboratories and checklist for assessors

⁷ www.ifs.edu.in/IFS.EDU.BROCHURE.pdf

- Expert cannot be called as witness;⁸

The common perception Indians do have in their minds are that the birth/death certificates as well as recording the discharge and admission of the patients in the hospital consumes so much of the time. In fact, not only this medical practitioners often hesitate to be the part of the case which is of medico-legal nature. Some of the possible reasons for the same could be as follows:

- Undue time consumption;
- Repeated adjournments;

India is a rich land in terms of law. India has almost a law on each and every subject. In regard to the criminal cases the criminal procedure code (CrPC) together with Indian Evidence Act are the parent laws governing the criminal cases in India. Criminal procedure code prescribes the method of admitting and the procedure thereafter to be followed throughout the trial of the case while, on the other hand the Indian evidence act prescribes that how an evidence in the criminal trial has to be admitted as well as to what extent it has to be admitted, the relevancy of the evidence etc.

In a case accused fails to answer any of the most important and relevant question in the trial section 313 of CrPC must be amended as to enforce against him for DNA test. This could provide the law enforcers opportunity and easiness for investigating the crime as well as to bring the truth from back row to the front and make it wrong done visible.

The principle of *Onus Probandi* has been recognised as the important principle in each and every criminal trial. The meaning of the principle is that, every person should be presumed innocent until proved guilty. The proving of such guilty should not be simply just proving this; the guilt of the person should be proved beyond reasonable doubt. This principle of *Onus Probandi* has been recognised under the Indian evidence act and thus it forbids the use of forensics in criminal trials. In olden times the forensic findings could be doubted about the findings but with the evolution of modern techniques which are definitely more advanced than the older ones the results and the tests could be more accurate and reliable.

FORENSIC SCIENCE AND CRIMINAL PROSECUTION: SCENE OF OCCURRENCE

A scene of occurrence in simple words means the place where one or more person assembles to commit an act which has been prohibited by any law for the time being in force. While the crime is committed the traces are exchanged between the persons committing the crime,

⁸Arindam Datta, —*Forensic Evidence: The Legal Scenario*”, Dept. of Law, University of Calcutta, <http://www.legalserviceindia.com/article/I153-Forensic-Evidence.html>

between the crime scenes and the culprits etc. these traces are usually transported by the human as well as other agencies which helps to investigate the crime and the crime scene to find out the untold story of, how crime happened?, when does it happened?, etc. the information, traces so collected are useful to:

- Establish corpus delicti
- Provide link between the criminal, the victims and the scene of occurrence; and
- Evaluate the patterns of events.

Some of the evidences are of such a nature that they perish soon and there remains only one or no chance of examining them. Such evidences have to be fully exploited to secure the full opportunity of putting the culprit behind the bars. (For example, if the crime scene was a beach there are high chances that before the foot-print traces could be examined and taken to any expert they would be perished and available no more.)⁹

Cases solved using forensic science:

In case of *Marachalil Chandra Tukaram Talekar v. State of Gujrat*,¹⁰ The particular case was argues in sessions as well as high court over the trail of blood found from front door to the vakil's corridor door respectively marked as H and H-1. The theory of the defense was that the victim was stabbed somewhere else as the serious stabbed person cannot move from the front door to the corridor and hence the victim was stabbed somewhere else and brought to the house in question. The high court took the view that doctor had come to the conclusion that it was very possible for the deceased victim to cross the door and come to corridor after he had received the stabs and hence, the high court concluded on the materials placed on record that there arises no seed of doubt the place where the deceased victim received injuries was the same room and not anywhere outside, after which he was carried from there while the breathe still had hold the life. With this, the fact that the blood was still dripping outside the body is supported and hence the deceased victim was alive that moment.

*Vasu v. Santha 1975 (Kerala)*¹¹ the court in the respective case laid down certain guidelines to be followed whenever the forensic evidence has to be taken and admitted to ascertain the parentage of the child.

- As a matter of course the blood tests could not be ordered by the Indian courts
- There should be a prima facie case and a strong ground from which court could render the non-access so as to eliminate the presumption of section 112 of the evidence act.

⁹ *History and development of forensic science in India* by RK Tewari, KV Ravikumar Bureau of Police Research & Development, Ministry of Home Affairs Government of India, New Delhi, India.

¹⁰ 1980 Cri. L.J.5 (Guj.)

¹¹ AIR [1986] M.P. 57

- Before blood test could be ordered the court should in advance ascertain the consequences of such order
- No one could be compelled for giving samples for the purpose of analysis. And no adverse conclusion to be drawn on the refusal of the person for giving blood samples.

Tandoor Murder Case (1995) Delhi¹² this case was the first case in the history of Indian case laws that has been solved with the help of powerful forensic science. In this particular case Susheel Sharma murdered his wife Naina Sahni whom he suspected of having love affair with his old fellow classmate and then congress worker Matloob Karim. In heat of his anger and suspicion he killed his wife Naina by shooting her on head three times with his revolver. Susheel Kumar drove the dead body of his deceased wife to a restaurant and with the help of restaurant manager he burnt her body in the tandoor. Later police got the blood stained clothes and revolver from the custody of the accused (susheel kumar) and sent it to lodhi road laboratory for collecting the blood samples from the weapon and the clothes. The blood samples form the cloth and revolver matched with the blood samples collected from Naina's biological parents Jasawant Kaur and Harbhajan Singh. Thus, the conclusion that was drawn was that the charred body remains that were recovered from the tandoor were that of Naina Sahni and Susheel Kumar was found guilty.

Changes required:

- Though there are tons of legislatures in India but a need to systematize and regulate the forensic science could be felt clearly by looking at the plight that India still is far behind other countries in application of forensics for solving the cases.
- The lack of work culture in this field could be traced with the help of the thing that there is hardly any forensic data available and recorded.
- Medico-legal experts should be encouraged. Experts should be encouraged to work in field of forensics.
- A national database system for keeping and maintaining DNA should be designed like the Americans have CODIS (combined DNA index system) where DNA of all the persons who are accused and suspected to involve in any crime could be recorded and kept in the data base. This system would also help to control and detect the serials criminals as well as terrorists.

¹² 1996 CriLJ 3944

CONCLUSION

With the help of this article at least a shallow knowledge could be gained that medical's forensic branch plays a very important role in legal system to determine and punish the crime. The medical experts must be encouraged to join and research on this field and to make this branch stronger and helps the forensics to grow. There is acute necessity to include more and more professionals trained in forensic to enlarge the scope in India. With this it could be said no doubt that the more the forensics will grow the less changes would be left for the criminal to escape from any sorts of loop holes and avoid the crimes and make justice live longer, bringing happiness to the people.