

The Role of Criminalistic Science in Investigating A Hit-and-Run Crimes

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Abstracts. The purpose of this research is to investigate the role of criminalistics science in solving criminal cases, utilizing a literature review method (Library Research). The literature review method is employed, which involves analyzing relevant books, legislation, and other written materials related to the subject matter under discussion by the author. Forensic sciences such as Forensic Medicine, Forensic Physics, Ballistic and Metallurgic Forensics, Photography, and Photographie Forensic, Forensic Fingerprinting. These auxiliary criminalistics sciences play a crucial role in investigating hit-and-run crimes through the application of techniques and tactics in finding perpetrators.

Keywords: Accident; Criminalistic; Hit-and-Run, Science.

1. Introduction

Humans, as social beings according to the natural order, always live together or in groups wherever they are. At the very least, communal living consists of two individuals, a husband and a wife. Throughout the history of human development, no one has lived alone and separate from other human groups, except in forced circumstances, and even then, only temporarily. Since ancient times, humans have had an innate desire to gather with their fellow beings in one community, a longing for society

Aristoteles (384-322 BCE), a Greek philosopher stated in his teachings that humans are "*Zoon Politicon*", meaning that humans fundamentally desire to be coexist, interact, and congregate with other humans. Consequently, humans are deemed social beings, driven by a communal spirit. While individuals possess distinct inner lives, humans as social beings cannot be spared from society. Indeed, humans are born, evolve, and ultimately perish within society.



In the modern era, despite the increasing advancements in Science and Technology, it's impossible for an individual to live decently and fully without the assistance or collaboration of others. Every individual has their own nature, character, and desires. Therefore, in society, when forming connections with one another, cooperation, mutual aid, and helping one another to obtain their livelihoods, sometimes there are disagreements. Each person has their own needs, however often these interests differ and even conflict, potentially leading to disruptions in the harmony of communal life.

These differences often lead to conflicts and can cause divisions within society. Therefore, in a well-organized society, attention must be given to the principles, norms, and regulations that exist for living within the community where one resides. These rules serve as guidelines for how individuals should behave and act within society and are known as societal regulations of conduct.

The existing and applicable laws must be obeyed, which means that individuals who violate any regulations or laws will face strict sanctions. Despite the presence of the Criminal Code (KUHP) and various other legislative regulations outside the KUHP, it is recognized that Indonesia is not entirely immune to various crimes or criminal activities. The Indonesian government is continuously striving to ensure that these regulations, at a minimum, can minimize the occurrence of crimes and criminal acts within Indonesia.

Hit-and-Run Criminal Offenses Reported to the Police almost every day, hit-and-run incidents occur, and it is difficult to apprehend the perpetrators. Therefore, Criminalistic Science is highly needed to uncover such cases and to investigate crimes by utilizing other auxiliary sciences in order to identify the perpetrators of the crime Based on the description above, the author chooses the title of this paper: "The Role of Criminalistic Science in Investigating A Hit-and-Run Crimes".

2. Research Methods

In composing this text, the author employs the method of library research, which involves studying literature books, legislation, and other written materials related to the subject matter used by the author to compose this text.



3. Result and Discussion

3.1. General Overview of Criminalistic Science

The Criminal Procedure Code (KUHAP) does not provide a definition of criminalistics science, but the definition of criminalistics science is provided by experts, one of whom is R. Soesilo. According to R. Soesilo, criminalistics science is the science used to determine the occurrence of a crime and investigate its perpetrator by utilizing natural science methods, while disregarding other methods used by forensic medicine (now known as forensic medicine) and forensic psychology¹.

In the handbooks of criminology and the basics of crime utilized by the Indonesian National Police:

a. The investigation of crimes involves the application of knowledge from physical sciences such as natural sciences, chemistry, mathematics.

b. The science used determines the occurrence of a crime and identifying perpetrators through investigations employing natural sciences, chemistry, toxicology, mental illness, and others.²

The scope of Criminalistic Science consist of:

a. Investigation Tactics

Speed is the first tactical demand for case examination; however, the priority of investigative tactics or criminal tactics is the knowledge that studies tactical problems in the field of criminal case investigation. In investigating a case, an investigator's speed must not compromise the orderly completion of subsequent technical examinations of the case. Investigators must always remain aware of the issues and difficulties to be addressed in the investigation. According to R. Soesilo, investigative tactics are the foundation for investigators to conduct their investigations.

This foundation is applied in taking the following actions:

1) Investigation at the scene of the crime (SOC)

¹ R. Soesilo, (2020). Kriminalistik (Ilmu Penyidikan Kejahatan), Politeia, Bogor, p.15-16

² A. Gumilang, (1993). *Kriminalistik Pengetahuan Tentang Taktik dan Teknik Penyidikan*, Bandung: Angkasa, p. 1



- 2) Revealing how the crime was committed
- 3) Identifying the perpetrator(s)
- 4) Understanding the perpetrator's modus operandi (methods and tools)
- 5) Determining the motive behind the crime
- 6) Techniques for examining or obtaining statements from witness and suspects
- 7) Investigative procedures
- 8) How to use informants.³
- b. Investigation Techniques

Investigation or criminal techniques encompass all activities that can be carried out in investigating a criminal case. According to Soesilo, investigation techniques are:⁴

1) Knowledge of traces (materials), tools, or technical means that can be used to commit crimes

2) Supporting tools to identify and collect traces of the tools used in criminal acts or evidence

3.2. Definition and Understanding of Criminal Acts

The term "criminal act" is used as a translation of the *strafbaar feit* or *delict*. *Strafbaar feit* consist of three words: *straf, baar, and feit*. The word "*straf*" means punishment, "baar" means able or permissible, and "feit" means deed. In the context of the term *strafbaar feit* as a whole, straf is also translated as law. It is common for "law" to be translated from the word *recht*, as if the meaning of punishment is equivalent to *recht*. For "*baar*", there are two terms used: "may" and "can", while the word "*feit*" is used with four terms: act, event, violation, and deed. Therefore, *strafbaar feit* refers to an event or deed that can be punished.⁵

³ Muis, Abdul, (2023). Hukum Kepolisian Dan Kriminalistik, Pustaka Reka Cipta, Bandung, p. `14

⁴ R. Soesilo, Op. Cit, p. 15-16

⁵.Chazawi, Adami, (2011). *Hukum Pidana Bagian I*, Rajawali Pers, Jakarta, p.69



According to some legal experts define a criminal act (*strafbaar feit*) as follows:⁶

a). According to Pompe. a "strafbaar feit" can be theoretically formulated as a brench of norms (distruption of legal order) intentionally or unintentionally commited by an individual, where imposing sanctions on the perpetrator is necessary to maintain legal order ensure legal interests are protected.

b). According to Van Hamel, a "*strafbaar feit*" is the power of an individual formulated in the law, characterized by being unlawful, punishable, and commited with fault.

c). According to Indiyanto Seno Adji, a criminal act is an action by an individual that is punishable by law, unlawful in nature, and involves wrong doing for which the perpetrator can be punished.

3.3. Definition of Hit-and-Run

Traffic accident cases in Indonesia are regulated by Law Number 22 of 2009 concerning Road Traffic and Transportation. The definition of a traffic accident as stated in Article 1 number (24) reads:

"Traffic Accident is an unexpected and accidental Road event involving a Vehicle with or without other Road Users resulting in human casualties and/or property loss".

One example of a traffic accident case on the highway is hit-and-run accidents, which have often claimed victims. Regarding hit-and-run cases, it is explained in Article 312 of Law Number 22 of 2009 concerning Road Traffic and Transportation:

"Any person who drives a Motor Vehicle involved in a Traffic Accident and deliberately does not stop his vehicle, does not provide assistance, or does not report the Traffic Accident to the nearest National Police of the Republic of Indonesia as referred to in Article 231 paragraph (1) letter a, letter b, and letter c without a reasonable reason shall be punished with a maximum imprisonment of 3 (three) years or a maximum fine of Rp75,000,000, 00 (seventy-five million rupiah).

Hit-and-Run cases involve collision incidents where the vehicle that caused the collision flees the scene and attempts to conceal its identify to avoid legal action.

⁶ Erdianto Effendi, (2014). *Hukum Pidana Indonesia Suatu Pengantar*, PT. Refika Aditama, Bandung, p. 69



1. Possible Crime

a. After the collision, the driver might not stop and may engage in the following actions:

(1) Fleeing the scene as quickly as possible;

(2)Trying to avoid vehicle identification, such as by turning off the lights;

(3)Taking the vehicle and abandoning it far from the scene of the incident, then reporting it as stolen.

b. After the collision, the vehicle stops briefly, and the driver might engage in the following actions:

(1) Removing the victim and hide it;

(2) Staging a self-inflicted accident, such as riding a bicycle and falling into a ditch.

In such scenarios, there may be evidence left behind by the driver at the scene, such as the driver's fingerprints on the victim's body and other objects.

2. Signs of a recently that has been involved in a collision. The following signs can be observed by road officers to promptly take action if the vehicle is suspicious:

- (a) Speeding away at high speed;
- (b) Lamps and glass may be broken;
- (c) Turn the off lights at night;
- (d) Dents on the vehicle's body or so on;

(e) There are scratches cat marks of a color different from the vehicle's original color.

3. The first action on human victims. After marking the victim's location (with chalk or etc), immediately transport them to the nearest hospital or doctor for prompt medical assistance:



(a) if the victim has passed away, a post-mortem examination *visum et repertum* for the deceased;

(b)if the victim is still alive, a temporary post-mortem examination visum et repertum can be requested (refer to the JUKNIS for Forensic Medicine).

4. Evidence Search: Evidence in Hit-and-Run cases is sought in various object as follows:

a) At the scene: Tire marks (in the form of impressions or prints), brake marks on the road, glass and paint fragments, and more.

b) On the human victims: Clothing with marks, torn clothing, blood, paint fragments, hair samples, identification documents, and more.

c) On the victim's vehicle: Paint marks from the colliding vehicle, glass fragments, torn or broken parts, fingerprints of the suspect driver.

d) On the suspect's vehicle: Paint marks from the victim's vehicle, glass fragments from the victim's vehicle, torn or broken parts, clothing fibers from the victim, victim's blood samples, damaged parts, and collision marks on the suspect's vehicle.

5. Evidence collection. Before collecting evidence, it is necessary to create a complete sketch of the crime scene. The position of the evidence must be clearly visible in the sketch. Similarly, all objects must be photographed. After that, the collection of evidence must be carried out as follows:

(a) evidence must not be mixed with each other:

(b) each type of evidence is placed in a container;

(c) evidence that cannot be taken can be examined directly at the.

6. Securing evidence. After being collected, evidence can be secured as follows:

a. Paint Fragments :

(1)paint fragments of evidence must be separated between the victim's vehicle paint and the suspect's vehicle paint, ,

(2)likewise, comparative paint samples taken from vehicles must be separated;



(3) then, each should be placed in individual containers.

b. Glass fragments should be separated as much as possible according to their respective tools, with each type being placed in separate containers.

c. Victim's clothing: torn clothing of the victim must be separated from the torn pieces or fibers that adhere to the suspect's vehicle.

d. Blood :

(1) the blood of the victim must be separated from any splatters found the suspect's vehicle.

(2) fresh blood is placed into separate bottles and preserved with a preservative agent.

e. Fingerprint: fingerprints must be collected and examined by a dactyloscopy specialist for identification purposes.

f. Tire tracks:

(1)tire tracks in the form of impressions should be cast;

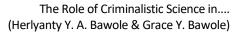
(2) Tracks in the form of prints can simply be photographed vertically with a.

g. The *Mark* found on the vehicles involved in the collision can be directly examined by experts at the scene.

The stages above are the stages in uncovering the perpetrator of a Hit-and-Run crime using a criminalistics approach along with other necessary auxiliary sciences needed to uncover the case. The role of criminalistics is extremely crucial in solving such hit-and-run cases where the perpetrator remains unidentified by the police. Therefore, the presence of criminalistic knowledge really helps the police in uncovering the hit-and-run perpetrator.

4. Conclusion

The auxiliary sciences of criminalistics play a crucial role in uncovering criminal acts, namely Medicine Forensics, Physics Forensics, Document Forensics, Ballistics and Metallurgical Forensics, Forensic Photography, and Fingerprint Forensics. These auxiliary sciences aid in revealing hit-and-run crimes through techniques and tactics





in identifying perpetrators. The presence of auxiliary sciences in criminal law, particularly Criminalistics, greatly aids law enforcement in the investigation and prosecution processes, especially concerning increasingly complex crimes veering towards Extraordinary Crime. The Hit-and-Run offense against a pregnant woman remains unresolved by law enforcement authorities to this day. Therefore, the role of criminalistics as an auxiliary science in identifying perpetrators cannot be overstated. Investigators and prosecutors must be capable of apprehending the culprit behind this irresponsible crime to uphold the ideals of justice.

5. References

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