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## PRINCIPLES AND STANDARDS OF CRIME RECONSTRUCTION

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**Abstract:** This paper deals with crime reconstruction as a method of crime investigation which represents a set of systematic, analytical processes which serve to provide relevant information about the manner of creation and dynamics of crime perpetration. Special attention is paid to ethical principles of crime reconstruction, as well as to the relationship between a scientific method and crime reconstruction method. In addition to this, basic information on models, scientific principles and practical standards of crime reconstruction have been presented. The subject of research is directed towards the analysis of determinants of creation of material pieces of evidence, as well as towards establishing theories and scientific principles for their analysis in order to deduct evidence admissible in court. Finally, the paper analyses the place of crime reconstruction within a complex procedure of its clearing up and proving.

**Key words:** crime reconstruction, crime-investigation analysis, material evidence, proving procedure

### 1. Introduction

Crime reconstruction is an investigating method, in other words a set of systematic analytical processes which provide relevant information on the manner of occurrence and dynamics of perpetration of crime. Analyzing the traces and objects as elements of crime consequence, a crime investigator endeavours to deduct objective conclusions about a criminal act, the cause of occurrence of every trace and its place within a system of traces.<sup>1</sup>

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<sup>1</sup> Traces represent a specific reflection of dynamic elements of a criminal act, i.e. coded information which show the sequence and manner of crime perpetration.

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The basic principles of scientific trace analysis, which includes crime reconstruction, have been established by Gross in his work *Criminal Investigation: A Practical Textbook for Magistrates, Police Officers and Lawyers* (Gross, 1924). According to Gross, methodical, systematical analysis of determinants of occurrence of every trace (fact) is required and necessary for the proving procedure. To be more precise, this is a starting assumption to avoid faulty and to provide objective and legally relevant conclusions. For Bell criminalistic analysis is a part of standard procedure of proving procedure – it is a brain every individual part of which must be identified by scientific methods in order to be completed (cited according to Chisum, Turvey, 2007). Doyle, a student and for a certain period the assistant to Professor Bell, based his novels about Sherlock Holmes on the importance of reconstruction and the role of methods of logic, deduction and induction in the evidencing procedure. Locard, a founder of the first police laboratory (Lyon, 1910) and one of the founders of the first International Academy of Criminalistics devoted his attention to the implementation of scientific methods in trace analysis (cited according to Kirk, 1953). In his works Locard particularly underlined the need of a multidisciplinary approach to evidence analysis, as well as the multidisciplinary nature of criminalistics. The important contribution to crime reconstruction was given by Kirk and his blood trace analysis. According to Kirk, material evidence cannot be faulty, it cannot give a false testimony, it cannot be completely absent, it can only be misinterpreted. Material evidence is always there waiting to be analyzed (Kirk, 1953).

In addition to material evidence, a testimony by a witness, a victim or a suspect can be a starting point for crime reconstruction. The perception of a criminal act by various subjects is also different – it is the result of the reflection of the act and the determinants of the criminal act in their minds. The perception of a person may not necessarily correspond to the objective actual position at the crime scene. The results of reconstruction depend on the observing of ethical principles of the profession, the application of scientific methods and the practical standards of evidence analysis.

## **2. Ethical principles and objective approach to evidence analysis**

The results of reconstruction are directly conditioned by the professionalism which is manifested through professional (having the necessary knowledge related to the profession) and moral component (ethical code of a profession) of a crime-investigator's personality. The objective analysis of facts, i.e. pieces of evidence, implies the existence of professional integrity and independence of a person deducting conclusions. Objectivity is directly conditioned by the interaction of both external and internal factors. The crime investigator must be

aware of his objective capabilities and possible subjective influence, which must be eliminated in the course of crime clearing up.

Opposite the subjective and emotional there is the objective, which is based on ethics, the approach which starts from relevant pieces of evidence determined by scientific methods. A scientific method is an argument for an objective evaluation of pieces of evidence, the procedure which consists of establishing and checking of hypotheses (versions) on the way towards establishing the truth. Court decisions are reached based on objectively established facts, pieces of evidence or group of evidence. During the procedure of deducting conclusion the facts which are not in accordance with the set versions (hypotheses, assumptions) cannot be ignored, nor certain conclusions can and may be made if the facts confirming them are lacking. Only this is a correct and ethical approach to implementation of crime reconstruction.

Wishes and expectations of persons performing the reconstruction may influence their perception and analysis of the crime. Generally observed, the results of perception depend on the subject of perception, the circumstances under which the perception is carried out and the state of person's mind. As far as the phenomena of the effect of the observer, the effect of the context and the effect of the expectation are concerned, the knowledge of cognitive psychology should be taken into account. At the top, general level, the effect of the observer is an error in perception occurring due to some characteristic or the condition of the observer. Criminalists often, due to subconscious influence of a specific case, ignore the principles of cognitive psychology and the methodology of scientific research, which can lead to various interpretations of their conclusions. On the other hand, criminalists must be aware of what kind of results is expected from them. Ambiguous conclusions can be the consequence of the effort to supplement the incomplete, unreliable and undetected evidence. The consequence of a subjective approach can be the identification and interpretation of evidence based only on experience and belief that they are not only necessary but also sufficient for proper interpretation.

When deducting the conclusions in the procedure of reconstruction haste must be excluded and the pressure that the job must have already been completed should be rejected. The reconstruction itself must base on evidence, not on assumptions. The objective approach is contrary to acceptance of someone other's unverified attitudes, which may base on non-established and unverified facts, referring to emotions, warning the criminalist that his conclusions might stigmatize someone or even confined, warning that criminal act is actually an accident, diminishing the guilt of the accused, etc.

Narrowing the space for the influence of subjective factors (what he feels, or rather what he believes in), and the application of adequate scientific meth-

ods and procedures make the quality approach to deduct objective conclusions in the crime reconstruction procedure.

The application of ethical principles in the implementation of reconstruction is an essential element of both professional and objective conduct. Chisum and Turvey defined the starting assumptions based on ethical principles, from which any criminalist should start in crime reconstruction procedure (Chisum, Turvey, 2007). These starting assumptions are as follows:

- 1) As a performer of reconstruction, I (i.e. the criminalist, note by the author) plead for the application of the principles of science and logic, following daringly the truth no matter what it is;
- 2) As a performer of reconstruction, I confirm that the scientific spirit must be directed towards investigation, progressive, logical and unbiased;
- 3) I will never intentionally make a wrong conclusion (I will never allow the wrong impressions by which someone might influence my work);
- 4) As a performer of reconstruction, I will never present evidence which support only one side;
- 5) As a performer of reconstruction, I have only one professional requirement – truthfulness, accuracy, correctness and one ethical requirement – the whole truth and nothing but the truth;
- 6) Urgency in special cases must not be the cause of detachment from professionalism.

The first precondition in order to avoid errors is the existence of consciousness about the possibility of their occurrence. The power of moral, ethical conduct is directly proportional to the capability to resist conscious subjective elements. On the other hand, the professional requirement which is always before the criminalist is the consciousness of the need of critical analysis of his own acts and the necessity of constant improvement.

### **3. Scientific method and crime reconstruction method**

Kind thinks that there are two types of criminalists who do the reconstructions – a criminalist-scientist (modern criminalist, author's note) and the criminalist-historian (the criminalist who does not apply contemporary scientific methods, author's note). The criminalist-historian makes the reconstruction intuitively, his work bases on experience which includes the picture and theory not supported by arguments about what happened. On the other hand, there is a criminalist-scientist, who analyzes every trace of the event and fits it into the whole picture (Kind, 1986). However, the expertise and competency of criminalistics cannot be connected to modern criminalistic conduct. In the past care was taken about the com-

petency and expert knowledge of persons involved in the parts of investigation, primarily crime scene investigation and reconstruction. (Zarkovic M., Kesic T., 2003).<sup>2</sup> Crime reconstruction is an activity based on forensic science, scientific method, analytical logic and critical thinking. The results of the reconstruction are directly conditioned by the use of scientific method, which defines the analytical procedure through the development and testing of hypotheses. The investigators seek the explanation of the set hypotheses by identification of pro and contra facts. The essence of scientific method is to define conclusions based on the data and not to define facts based on the conclusions. The scientific method of analysis consists of six stages which are connected in a circular manner (Bevel, Gardner, 2002):

- 1) defining the problem or question;
- 2) gathering data on the problem;
- 3) setting hypotheses;
- 4) classification and organization of data;
- 5) checking hypotheses;
- 6) defining conclusions.

The procedure starts with a question and generally ends with an answer which often raises another question. The accumulation of scientific knowledge about the concrete subject leads to the development of science. The scientific method consists of a synthesis of knowledge of investigating procedures and the correct usage of this knowledge. The conclusions derived in the procedure of reconstruction should not be a simple result of experiences (which should not be neglected), but the result of verified, checked hypotheses (versions) through the application of scientific method. A special group of errors consists of errors in application of logical methods, because of which every crime investigator should know the basic logical methods on which the process of conclusion is based. Logic is not only the science of laws and forms of thinking, but also of the most general laws of identifying the objective reality. The objectivity depends on the possibility to determine based on the consequence the structural

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<sup>2</sup> Thus, for instance, by adopting the Code of court criminal proceedings of the Kingdom of Yugoslavia in 1929, crime scene investigation was regulated as both court and police action (the latter did not have any importance if not approved by the investigating judge) where two witnesses and the keeper of the minutes had to be present. When investigating a crime scene, the judge used his general knowledge and professional education, which were not sufficient, so he used to summon the persons who had certain specialized knowledge of some science or skill. Therefore, the law-maker did not realize then the need to investigate a crime scene by qualified persons. Also, an attitude remained recorded about the incompetence of lower police officers and gendarmes regarding crime scene investigation, considering that they did not have appropriate education and therefore could not understand and apply scientific and technical manners of investigation. Due to this, it was pleaded that their role was to secure the crime scene only, while the investigating authorities and experts (medical examiner and technical experts) performed crime scene investigation. Cited according to: Zarkovic M., Kesic T., (2003).

elements of action which caused the consequence in the first place. Realistic accomplishment of success is possible only if criminalistic assumptions are respected, especially those of causality built on logical bases, which increase the objectivity in deriving conclusions. The criminalist aims at his findings to be correct and his methods reliable.

Critical thinking, within the context of this paper, represents intellectual, goal-directed activity towards making conclusions about the evidence and criminal act. The basis of critical thinking is not made by the assumptions but it bases on the principles of science and scientific methods. Ogle thinks that this notion means careful and accurate evaluation and judgment the goal of which is to avoid general errors of logical concluding, in other words advocating of one hypothesis which is not supported by arguments (Ogle, 2007). In the procedure of scientific analysis of a criminal act there are often situations when a criminalist comes along a paradigm or contradictoriness of scientific and legal facts.

Scientific analysis of facts, the application of methods and principles of science make basic constitutive means with the aid of which the difference is made among assumptions, opinions, scientific facts and theory.

#### **4. Practical standards of crime reconstruction**

Practical standards represent fundamental rules of evidence interpretation in the course of crime reconstruction. The essence of reconstruction is made of not only the answer to the questions what, where and when, but also how and why. Crime reconstruction is the result of long-lasting and methodologically coordinated scientific procedure of analysis. This is the last step within the analytical procedure, where information held by every element of consequence at the crime scene are identified. The goal of the reconstruction might be defined as making conclusions about the criminal act based on information held by each concrete trace and system of traces as a whole of crime consequence.

The results of reconstruction depend on the used reconstruction technique, recommendations for the consequences analysis and practical standards. During the crime reconstruction the conclusions should be made in accordance with the dynamics of evidence occurrence. Various material pieces of evidence have various roles, possibilities and importance in reconstruction (traces of blood, weapons, arson, etc.). Information deducted by the analysis of various clues, as a segment of the plot (action), must be fitted into a whole, i.e. the picture of a crime plot.

All criminalists would have to strive towards objectivity and professionalism (expertise) in their work. The expert side of crime reconstruction is made of the application of principles of criminalistic science and scientific methods. The most important segment of forensic science is to establish professional stan-

dards.<sup>3</sup> Practical standards are protection from ignorance, incompetence, misunderstanding and similar, which are explained by the scientific reasons. A great number of practitioners and scientists have given their contribution to defining practical standards of crime reconstruction, among whom a special place belongs to Chisum, Turvey, Rynersen, Bevel, Gardner, Gross, Kirk, Saferstein, Thornton, Locard, etc. The standards without which an objective reconstruction would be impossible are as follows (Chisum, Turvey, 2007):

- 1) A criminalist who performs a reconstruction should avoid all prejudice;
- 2) A criminalist performing a reconstruction responds by the reconstruction to the requirement to make a connection among all pieces of evidence and all pieces of information according to the chronology of their occurrence;
- 3) A criminalist is responsible to make conclusions whether a concrete piece of evidence is relevant to be used in the reconstruction;
- 4) A criminalist performing a reconstruction must, whenever possible, go to a crime scene;
- 5) The conclusions of the reconstruction and their starting assumptions must be in a written form;
- 6) A criminalist must demonstrate and understand the applied science, forensics and scientific method;
- 7) The conclusions of the reconstruction must be based on the established facts (only the established facts may be the basis of reconstruction);
- 8) The conclusions of the reconstruction must be valid, based on logical arguments and analytical thinking;
- 9) The conclusions of the reconstruction must be deduced using scientific methods;
- 10) The conclusions must demonstrate understanding and clear difference between object identification and determining a degree of its similarity (the use of precise terms is basis of understanding);
- 11) In his conclusions a criminalist must clearly and with arguments show that he understands the established sequence of pieces of evidence and Locard's principle of transfer;
- 12) Every piece of evidence, every piece of data or every conclusion on which the reconstruction is based must be available in documents, i.e. written papers it refers to.

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<sup>3</sup> In order to define the assumptions and guarantee the successfulness of police work in our country, various factors have been pointed out and underlined which in time got their expression in many professional police codes of conduct. They all highlight, as an important element, a promise to citizens that the police officers shall observe the highest professional standards when rendering their services to the citizens. Among other things, this means that every police officer aware of his responsibility for the quality of his professional work shall use every available possibility to extend and improve the level of his knowledge and competency. Cited according to Zarkovic M. (2003a)

The quality of a reconstruction is determined to a large extent by the quantity and quality of information, as a basis for deducting conclusions about a criminal act. In order to have all pieces of information available, it is necessary to have the following at one's disposal:

- 1) A list of subjects involved in the investigation;
- 2) The documents referring to a crime scene, including all collected pieces of evidence, protocols, notes, sketches and photographs;
- 3) The reports and notes by the subjects who rendered assistance in the course of crime scene investigation;
- 4) Forensic reports, notes and laboratory findings;
- 5) The reports of medical examiners;
- 6) A list of witnesses found at the crime scene;
- 7) Every document which includes a statement by a witness or the data about the suspect, including tapes, transcripts or reports on summary results and every other documents that contain facts about the criminal act.

### **5. Principles of evidence analysis in the course of crime reconstruction**

Reconstruction is the goal of analysis of traces of a crime. Bevel and Gardner have defined a conceptual model of trace analysis in the course of crime reconstruction, which consists of four segments (Bevel, Gardner, 2002):

- 1) Collecting of evidence and information;
- 2) Evaluating objectivity and relevance of evidence and information;
- 3) Establishing importance of evidence (what is the basic nature of a plot segment and the specific piece of evidence), and
- 4) Connecting all segments of evidence and information and creating an objective, logical picture of a crime.

It is necessary to use system-structural method as a starting point of reconstruction of elements of criminal act (Krstic, 2000). Its use enables to identify the elements of criminal act more clearly, the mutual connection and relations of elements of action and consequences and the entirety of the criminal act system. The analysis triangle is the most frequent scientific frame for the analysis of crime elements (perpetrator, victim, crime scene). The characteristics of triangle elements represent the determinants which influence the possible shape of crime manifestation. Bevel and Gardner (Bevel, Gardner, 2002), as well as Ogle (Ogle, 2007), use the analysis triangle to identify the connections within the chronology of trace occurrence, i.e. of material evidence. A relevant piece of evidence is the evidence which occurred as a con-



sequence of criminal act, which manifests through the establishing of a link between a perpetrator, his victim and a crime scene. The analysis triangle explains also the possible connections and directions of transfer of materials and physical characteristics between the perpetrator and a victim, the perpetrator and the crime scene, and the victim and the crime scene in the chronology of occurrence of crime trace (transfer of evidence – traces of perpetrator's blood on the victim or victim's blood on the perpetrator, traces of perpetrator's or victim's papillary lines on the crime scene, traces of dust from the crime scene on the perpetrator, etc.). The transferred matters of the reflection of physical characteristics represent a proof of contact between the two objects (Locard's principle of exchange).

Analyzing the connection perpetrator-instrument-object of assault within the system of intertwining of things, events and processes, Vodinelic represented the transfer of matter within the process of a relevant trace occurrence (wound on the victim – traces of the victim on the perpetrator) by the following formula (Vodinelic, 1992):

$$\begin{aligned} A &\rightarrow B \\ B &\rightarrow A = A^1 \end{aligned}$$

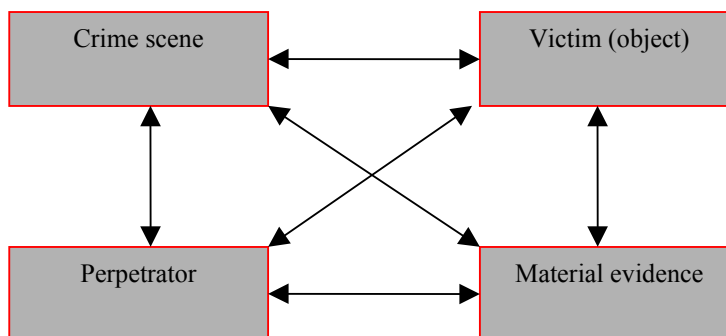
In his analysis Lee uses four elements, and they are crime scene, victim, material evidence and perpetrator (cited according to Vernon, 2006). A trace becomes relevant only when its connection with the crime has been established. Thus, for instance, a trace of blood does not necessarily mean that a crime has been committed; it may be a consequence of accidental hurting. However, if such a trace is found on the knife after discovering a body with traumas that cannot be explained as suicidal according to the place where they were made, such a trace becomes evidence which should be connected with other elements of analysis triangle. In addition to the stated, it should take into account during the analysis of a concrete trace the changes that every trace may suffer in the course of time lapse (trace dynamics).

The analysis of every trace as a holder of information on the crime action should result in the answer to the following questions:

- 1) How did a trace occur?
- 2) What is his place within the system of traces as elements of criminal act consequence? and
- 3) What is the function of action element because of which the trace occurred during the criminal action?

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<sup>4</sup> A = perpetrator, B= victim; A1 = victim's trace on the perpetrator



**Figure 1: Concept of connections (according to Lee)**

The objective answer to the question how a concrete trace occurred is possible to give by scientific establishment of his cause. Causality is a scientific principle the application of which provides for the objective approach to trace analysis. The principle of causality cannot be negated, only a misrepresentation of causality can be negated. Causality in forensics offers scientific basis for directing perception and thinking of a criminalist within the process of comprehension of relevant facts necessary to create an objective picture of a crime. Taking into account the principle of causality, in order to deduct objective conclusions on the cause of occurrence of every concrete trace, as well as on the chronology and dynamics of crime, it is necessary to take into consideration the characteristics of the action (causes) due to which every specific trace occurred:

- 1) The characteristics of the object, i.e. the object whose action caused a trace;
- 2) The type of activity (stab with a swing downwards, with a side swing, etc.);
- 3) The intensity of activity (the size of the wound together with the weapon suggest what physical force was used, and gunpowder residue, if firearms were used, suggests the distance of the shot); and
- 4) The position between the perpetrator and the victim at the moment of action taking.

According to Vodinelic, all those circumstances preceding the consequence of a criminal act are called antecedents (predecessors), and all things produced by the critical act can be called consequents, or consequences (Vodinelic, 1984). It is at that necessary to determine in the course of criminal act clearing up all antecedents (primarily by crime scene investigation), and then identify among them the one which was necessary and which can be considered a cause. The

cause of a certain crime is that previous occurrence, i.e. one or more antecedents, from which the forbidden consequence resulted unavoidably.

By the analysis of every concrete trace, we determine a specific causal connection at the relation cause-consequence, i.e. action-trace. Thus, for instance, in order for the elements of consequence of criminal acts of violence to be cleared up and connected into a logical whole, the following crime-investigating rules should be taken into account:

- 1) a trace represents a consequence (primary, secondary) of the perpetrator's or victim's actions;
- 2) each trace has another to follow, as a logical element within the system of elements of perpetrator's or victim's actions, and
- 3) within the causal relation between the perpetrator's action and the victim's action there is a trace of violence undertaken by the perpetrator (a trace of the perpetrator) and a trace of the victim's response (a trace of victim's defense).

Defining the segments of the action is carried out with reference to real or relative time of origination of the trace and carrying out of elements of the action which resulted in a trace as a consequence. Criminal act cannot be committed instantaneously. Bevel and Gardner use time windows or snapshots to identify the elements within the action system. Every trace at the crime scene is a necessary and logical consequence of the criminal act's nature and the manner of its commitment. It is an objective approach and the only way towards the truth, which is the goal of crime-investigation. The truth and non-truth are the qualities of the knowledge which depend on the objective approach of a criminalist (Bevel, Gardner, 2002).

## **6. Models of crime reconstruction**

For Bevel and Gardner, reconstruction is the final element of analysis, and the reconstruction procedure consists of seven stages (Bevel, Gardner, 2002):

- 1) collection of evidence and using the entire evidence material, suitable for criminal act qualification;
- 2) establishment of specific parts of the picture or segments of a criminal act;
- 3) the analysis of the connection of every segment with other segments within the sequence of determined connections of crime segments;
- 4) the identification of a place within the line or sequence of every crime segment;

- 5) the analysis of all possible sequences and contradictory sequences where they exist, with the verification of evidence which may be more probable;
- 6) the identification of the final line or sequence within the criminal act;
- 7) establishment of a picture of the entire criminal act based on the established connection among all segments.

The reconstruction procedure was determined in a similar manner by Ogle as well (Ogle, 2007). Chisum and Rynearson start the reconstruction procedure from the concrete material evidence and their role within a criminal act. Focusing on the role that evidence has in time sequence analysis and the type of specific crime actions undertaken, Chisum and Rynearson defined the model of crime reconstruction (Chisum, Rynearson, 1997). The division of evidence provides for the fundamental answers to the questions which are the subject of reconstruction: who, what, where, when, how and very often why (Chisum, Turvey, 2007). When connecting the segments of the action, the construction of the time line of their occurrence is of extreme importance. Understanding the importance of identification of elements that make the action of a crime and taking into account the fact the plot of various crimes is made of various elements, Rynearson tried to determine a scheme of occurrence of elements of every criminal act (Chisum, Rynearson, 1997). Accordingly, the time line represents a quality basis for the identification of the sequence of their manifestation within the criminal act system. The time line allows the criminalist to keep attention to the global picture of the criminal act while not neglecting the details the presence of which is required.

The identification of a role is the process used to identify (come to life) the role of every participant in a criminal act, based on the developed hypotheses and theories of revision of potential actions (undertakings) by the individuals in a concrete criminal act or series of criminal acts. Every special place within the reconstruction represents a method of mind map, which analyzes evidence in the attempt to make conclusions about the motive and the manner of perception of a criminal act by the perpetrator.

## **7. Conclusion**

The conclusions reached by the crime reconstruction are behavioural variables used in deducting conclusions of a criminal act. There is currently a lack of research of validity of conclusions deducted in the reconstruction procedure. Validity and reliability of crime reconstruction depend on the available evidence and forensic conclusions resulting from the evidence. If evidence of sufficient

quality are lacking, the predictions generated using this method must be deducted carefully and with clear understanding of the existing limitations (Hicks, Sales, 2006). The conclusions must be verified with the results of forensic analyses, i.e. to what extent the stated reconstruction conclusions match these results. Among other things, reconstruction is particularly important for perpetrator's profiling. In order to reach conclusions about the perpetrator, it is necessary to know what happened at the crime scene. Crime scene analysis contains many answers related to the perpetrator's motive, which cannot be understood by the fact that the crime has been committed (Chisum, 1998).

In order to improve crime reconstruction methods it is particularly important to improve scientific methods used in the reconstruction, as well as to educate the people doing the reconstruction. These two tasks are intertwined and without them there is no objective and legally relevant reconstruction.

The results of crime reconstruction, as of any other expertise, depend on the professional credibility of the criminalist working on it. Ogle presents a way of his perfection schematically by a four-angle pyramid, which consists of four various degrees of education narrowing at every following level, i.e. specialize towards the research of a group of specific problems (Ogle, 2007). After having passed all the levels, there is an expert in a certain field at the top of the pyramid, i.e. the person with a true expert credibility required for the expertise.

The professional and moral components are the basis of the efficient work within the evidencing procedure of a criminal act.

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## PRINCIPI I STANDARDI REKONSTRUKCIJE KRIVIČNOG DOGAĐAJA

### Rezime

Rekonstrukcija krivičnog dela se definiše kao skup sistematskih analitičkih procesa kojima se obezbeđuju relevantne informacije o načinu nastanka i dinamici izvršenja krivičnog dela. Polaznu osnovu u njenoj realizaciji čine materijalni dokazi, do kojih se najvećim delom dolazi na uviđaju, ali i iskazi svedoka, žrtve i okrivljenog. Pri tome treba imati u vidu činjenicu da je percepcija krivičnog dela od strane različitih subjekata različita, te da je rezultat odraza radnje i determinanti krivičnog dela u njihovoj svesti. Rezultati rekonstrukcije zavise od poštovanja etičkih principa profesije, primene naučnih metoda i praktičnih standarda analize dokaza. Takođe, oni su direktno uslovljeni i profesionalizmom koji se manifestuje kroz stručnu (posedovanje neophodnih znanja vezanih za profesiju) i moralnu komponentu (etički kodeks profesije) ličnosti kriminaliste. Objektivna analiza činjenica, odnosno dokaza, podrazumeva postojanje profesionalnog integriteta i nezavisnosti osobe koja izvodi zaključke. Poseban akcenat u postupku rekonstrukcije treba staviti na praktične standarde, kao fundamentalna pravila interpretacije dokaza u postupku rekonstrukcije krivičnog dela.

### **Summary**

Crime reconstruction is defined as a set of systematic analytical processes which gives us relevant information on the manner of occurrence and dynamics of crime commitment. The starting basis in its implementation is made of material evidence, which is mostly gathered during crime scene investigation, but also testimonies of witnesses, victims and suspects. The fact that the perception of a crime by various subjects is various as well should be taken into account at that, and that it is the result of a reflection of the action and determinants of criminal act in their mind. The results of reconstruction depend on the observing of ethical principles of the profession, the application of scientific methods and practical standards of evidence analysis. Also, they are directly conditioned by the professionalism manifested through expert (possession of knowledge necessary for the profession) and moral (ethical code of the profession) components of the personality of a criminalist. The objective analysis of facts, i.e. evidence, implies the existence of professional integrity and independence of the person deducting conclusions. Special accent during the crime reconstruction should be put on practical standards, as fundamental rules of evidence interpretation within the crime reconstruction procedure.