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Contribution to the theory of criminalistic identification, non-identification examination and forensic identification of vehicle

Príspevok k teórii kriminalistickej identifikácie, neidentifikačnému skúmaniu a forenznej identifikácii vozidla

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Abstract:

Criminalistic identification represents the process of identifying objects according to criminalistic traces, the aim is to identify the object that formed the criminalistic trace. The authors deal with the development of opinions on the concept of criminal identification. They describe the objects of identification, the second and the methods of identification spoofing. They extend the methods of identification research with the concept of recognition, identification of objects according to the memory trace. They comment on the possibility of determining the authenticity of the vehicle. I clarify the view of identification and non-identification research in criminology. They propose to remove vehicle identification from the issue of Criminal Identification of the Case and recommend to include it in the issue of forensic disciplines, such as "Forensic Vehicle Identification".

Keywords: *Criminalistics, identification, identification examination, non-identification examination*

Abstrakt:

Kriminalistická identifikácia predstavuje proces stotožňovania objektu podľa kriminalistických stôp. Autori sa v článku zaoberajú vývojom názorov na pojem kriminalistická identifikácia, popisujú objekty identifikácie, druhy a spôsoby identifikačného skúmania a rozširujú spôsoby identifikačného skúmania o pojem rekognícia - identifikácia objektov podľa pamäťovej stopy. Vyjadrujú sa k možnosti určenia pravosti vozidla. Upresňujú pohľad na identifikačné

a neidentifikačné skúmanie v kriminalistike. Navrhujú identifikáciu vozidiel vyňať z problematiky kriminalistickej identifikácie vecí a odporúčajú ju zaradiť do problematiky forenzných disciplín ako „forenznú identifikáciu vozidla“.

Kľúčové slová: *kriminalistika, identifikácia, identifikačné skúmanie, neidentifikačné skúmanie*

Introduction

The term identification has several meanings, in criminalistics we talk about criminological identification and we always mean the identification of the object that created the criminological trail. The purpose of forensic identification is to determine the relationship of an object to a track or other image. Identifying in forensics means determining that a particular reflected object has appeared on a particular reflecting object. Thus, criminalistic identification refers to the process by which the relationship between a track or other reflection and the object that actually created the track or other reflection is determined. There can only be a match (or a difference) between the criminal record and the comparative material, but never an identity. From the point of view of the terminology used in forensic identification, a forensic trace is often referred to as an identifying object of unknown origin (until the end of the identification process, it is not really known what created the trace). Comparative material is referred to as an identifying object of known origin (its origin is known because it was created by a specific object - the person who created the comparative material is responsible for this, which is primarily a forensic expert, but in some cases also a forensic technician).

The theory of forensic identification is a teaching about the general principles of identifying various objects according to their reflections, in order to obtain criminal and other evidence. For this reason, it is of general importance for both forensic science, forensic-practical activities, and for the theory of criminal procedural evidence. Learning about forensic identification is a special forensic theory and forensic identification is a specific method of forensic practice [1].

The basic starting point of criminalistic identification is the theory of interaction applied in the theory of criminalistic traces. From this theory, he uses the forensic thesis that the material objects involved in the crime (offender, his shoes, tools of the crime, etc.) act on the surrounding external environment during the crime - it is reflected, which cause a certain change - reflection. In forensics, these changes most often take the form of traces. In criminal identification, both traces of human consciousness and other types of traces in the material environment are used [1].

Basic principles of criminalistic identification

Criminalistic identification is a process during which it is determined which specific object created a particular forensic trace. It is a process of identifying objects according to forensic traces and other depictions, in which the connection of a person or thing with a forensically relevant event is sought.

The term identification generally has several meanings. Identification (from Latin) is a comparison of the unmistakable characteristics of an object with the subsequent determination or exclusion of conformity.

Identification is generally defined as identification, it has several meanings [2]. Depending on the field, there may be different types of identification [3]:

- General identification - identification and identification based on identical characteristics.
- Identification (natural sciences) - used to determine a natural, chemical compound or organism according to the characteristic properties of the object. such as a physical, chemical or biological property. These properties must be characteristic of the object.
- Identification (computer technology) - unambiguous identification of the event, record, block, file or other information unit.
- Identification (radiolocation) - used to determine the type of aircraft, target, object.
- Identification (telephony) - used to determine the wire along which the signal enters the connection field, ie to determine its number and further processing of this information.
- Identification (psychology) - used to determine the nature of stimuli or as a process of identifying an individual with another person or role model.
- Identification (criminology) - is designed to identify the subject or person.

Genesis of the concept of criminalistic identification

Criminalistic identification is a basic concept in the theory of forensics. Criminalistic identification is defined relatively uniformly in the theory of forensics. Just as an example, I would like to quote a few definitions according to important theorists of criminology in recent decades:

Protivínský - *Learning about criminalistic identification is a special forensic theory and forensic identification is a specific method of forensic practice. As a special forensic theory, the teaching of forensic identification is a methodological basis for researching and developing means, procedures and methodologies for investigating and preventing crimes. As a specific method of criminalistic practical activity, the form of decoding information from tracks and other objects at the level of individualization is* [4].

Pješčak-Bělkin – *Criminalistic identification is the process of determining the relationship between a track or other reflection and the object that actually created the track or other reflection* [5].

Porada – *Criminalistic identification is referred to as the method and process of identifying various material objects using forensic means. The question of whether criminal identification is a method or a process of comparison and identification needs to be approached functionally. The decisive criterion is the goal we pursue, which we want to achieve, ie whether it is our goal and the result of this research or the practical implementation of identification research* [1].

Musil (2004) – *Criminalistic identification is a cognitive method by which the relationship between two or more manifestations or parts of one and the same material object is individualized* [6].

Porada (2007) – *Criminalistic identification is the process of finding out in which specific way a forensic trail has been created. It is a process of identifying objects according to forensic traces and other depictions, in which the connection of a person or thing with a forensically relevant event is sought* [7].

Šimovček (2011) – understands c*riminalistic* identification at two levels, such as [8]

a) Forensic theory of identity and relative stability of objects of identification.

b) Specific method of cognition in criminalistic practice.

Straus (2012) - *Criminalistic identification is a process during which it is determined which specific object created a particular forensic trace. It is a process of identifying objects according to forensic traces and other depictions, in which the connection of a person or thing with a forensically relevant event is sought* [9], [10].

Konrád, Porada, Straus, Suchánek, I define the concept of criminalistic identification in the last textbook (2021) - *Criminalistic identification is a process during which it is ascertained which specific object created a specific criminalistic trace. It is a process of identifying objects according to forensic traces and other depictions, in which the connection of a person, thing or animal with a forensically relevant event is sought* [11].

The common feature of all definitions of criminalistic identification is:

- The aim is to identify the object according to the identical features found in the identifying objects
- Existence of at least two identifying objects
- The process by which identifying features are examined and compared

In the process of criminal identification, not all properties of the reflected (identified) object are analyzed, but only those properties that are reflected in the identifying objects are examined. From this point of view, the individual properties of the identified object are divided into identification and non-identification properties. The individual properties are not determined directly, but indirectly, indirectly, on the basis of examining the trace mechanism's own mechanism and with regard to the quality and quantity of information transmitted from the object that creates the trace to the object that receives the trace.

The meeting introduces a new concept of system identification [12]. The basic approach to solving tasks in interdisciplinary sciences, including criminology, is based on mastering systemic approaches. Systems research is a set of scientific and technical, economic and social problems and their solutions using concepts and techniques of a systemic nature. The current concept of system identification can be formulated as follows:

System identification is the specific creation of a system Σ(T) over a footprint and comparative material, to solve a specific problem P(T), which consists of the following two irreplaceable steps:

a) The values of parameters describing the manifestations of the object related to the solution of the problem P(T) are experimentally investigated on a real object. This step is called an identification experiment.

b) The values of the object manifestation parameters then form part of the input parameters for determining the identified quantities. The implementation of the inverse problem algorithm within the identification is the so-called identification calculation.

At present, biometric identification, which is based on the biometric characteristics of the human body and its manifestations, is already applied in a number of cases in forensic practice. According to the basic principle of identity, every person is identical and only with himself. If we scientifically prove and in many ways prove, even in the case of human locomotion, that our physical and mental characteristics are individual, then they can be successfully used to effectively identify a person with a very high degree of uniqueness. Biometric identification is actually the use of unique, measurable physical or physiological features (so-called landmarks) as human manifestations to unambiguously identify or verify his / her identity (identity). Prerequisite for the use of each biometric characteristic is uniqueness, relative stability, practical measurability and technological possibility of further automatic processing aimed at evaluating the compared characteristics belonging to different individuals [12].

Objects of criminalistic identification

Criminalistic identification objects can only be unique material objects that have stable spatial boundaries and are characterized by a unique and unique set of properties. In the process of forensic identification, several terminologically precisely defined objects are always applied, their definition is as follows:

The object identified is an object that is clearly related to a forensically relevant event, most often because it has created specific forensic traces. An object identified is an object that was reflected in a track or other reflection, as well as any object that is assumed to have been reflected in a track or other reflection, which must be verified by forensic identification. In forensic practice, these are people, things or animals.

In order to properly analyze criminal procedural evidence, it is necessary to further distinguish these reflected objects into:

- The object that actually left the track according to which it is detected, ie the object being searched
- An object that could have left a found track that needs to be checked, ie a scanned object.

The object being inspected is therefore an object that we believe may have created a specific criminal record. In practice, it is a group of objects that have the same group properties, corresponding to the group properties of the object that created the forensic trail.

The object being searched is an object from a set of scanned objects that has created a forensic trail.

The properties of the detected object can be determined exclusively according to its traces, eg the properties of the instrument used at the crime scene can be determined by examining the found mechanoscopic traces.

The properties of the inspected object are usually determined:

- According to comparative materials, eg according to experimentally created mechanoscopic traces of the tested instrument;
- According to a photo or description;
- Direct search and examination of the object in nature.

Identifying objects are those objects that reflect the properties of the identified objects. It can be said that an identifying object is an object with which we identify people, things or animals. In forensic practical activities, the identifying objects are divided into two main groups, namely forensic traces and comparative materials. There must be at least two identifying objects in a particular forensic identification process. However, these are often multiple objects.

The issue of identity is addressed through identifying objects. They are mere carriers of information, they serve as a means of determining the properties of identified objects. These are tracks, copies of tracks, and other views.

Traces are the most common and most important carrier of information about the identified object. Footprints can be replaced by their copies, eg a footprint is replaced by a plaster cast of a footprint.

The comparison material carries information about a securely known identified object. The basic property of comparative materials is an undoubted knowledge of which specific objects it comes from. Comparative materials may arise and occur as natural specimens, such as handwritten specimens that occurred by chance without a criminally relevant event and artificial, experimentally made, experimental specimens for the purposes of forensic identification. These can be, for example, control fingerprints. Comparative materials, which are created as experimentally made experimental samples, must be acquired on the basis of knowledge of the mechanism of trace formation and under conditions as favorable as possible to display the properties of the inspected objects.

In the process of criminalistic identification, two groups of objects can be distinguished:

1. Objects whose characteristics must be examined and on which the solution of the question of identity is aimed.
2. Objects that are not identified, but serve as a means of determining the properties of other objects.

Criminalistic identification can be divided according to various criteria, eg according to the subject carrying out the identification process, according to identified objects, according to expertise needed for research and methods used, according to

whether or not identification is achieved or according to types of identification marks used for identification. .

Methods of identification research in criminalistic

Typical cases of criminalistic identification include

- Comparison of a track with an identified object in nature
- Comparison of a track with an experimentally created track
- Comparison of two tracks secured at the crime scene
- Comparison of the track with the registered comparative material
- Comparison of the object in nature with registered comparative material

Some authors also include in the identification examination the case when parts of the building are compared with each other in order to find out whether they formed one monolithic unit [6] before separation. This view can be debated and there is a question of further theoretical analysis as to whether this is a real form of criminal identification.

In comparative research, we distinguish whether material traces or traces in human consciousness are used for criminal identification. When examining the representation of objects that are related to material traces, we distinguish four ways of comparative research:

- Laying side by side with a description of characters, so-called "scoring"
- Display overlay.
- Link display
- Geometric measurement.

Laying side by side with a description of features (so-called scoring) consists in placing comparison images, magnified into a single field of view as needed, so that selected identification features can be easily examined, compared, scored and described. This is the simplest and most widespread method of comparative research used in most types of forensic identification.

Various forensic technical means and procedures are used to create optimal research conditions, eg comparison microscope, magnifying and comparative episcope, epidiascope, etc. To permanently document this comparison, photographs of both compared objects are taken, which are glued side by side, identical identification marks are marked and describe.

The overlay of a view is that one transparent view is applied to the other so that both views seem to agree if the individual characters are the same. This method of comparative research is used in cases where the shape of the character is difficult to define and cannot be clearly described or measured. One of the comparative representations must be made on a transparent material.

The connection of views is that the views of the comparison objects join together so that one view forms a natural continuation of the other. Merge views is important

when comparing faded and other dynamic tracks. It is a very widespread method of research and documentation in forensic ballistics and mechanoscopy.

A comparative microscope in conjunction with a photographic documentation apparatus is also often used for this research. A very widespread documentation procedure is also the connection of two photographic images, one of which is cut so that the cut passes through as many characteristic identification marks as possible. When these characters are combined, all track lines in one view must continue smoothly in the other view.

Geometric measurement consists in measuring the distances of various selected points, angles made by their lines, etc. It is used, for example, when comparing shoe tracks, locomotion tracks, but also when identifying people according to photographs, etc. This method is often a supplement to any of the previous eg display connection.

Comparative methods based on the knowledge of various natural and technical sciences are used in the identification research of objects, which are related to material traces containing information about the internal composition of objects. For example, in forensic chemistry, basic chemical methods are used, in forensic biology, biological methods are used, in the examination of accounting traces, methods of economics and mathematics are used, etc.

In the identification examination of objects based on the use of footprints in human consciousness (recognition), comparisons using photographs or comparisons of living persons in nature according to anatomical and morphological features or, to a limited extent, according to functional and dynamic features are used. In the case of movable property, memory traces are compared in step-by-step moments (the knowing person originally perceived the thing and now presents it to him in natura). The perceived perception of the searched object is compared with the new perception evoked when the objects are perceived again.

Musil, Konrád, Suchánek they are considering a method of identification research still assembling parts into a whole [6]. We believe that this method of research is not a typical method of identification research.

The mentioned methods of identification research are used to identify the object according to material traces. In addition, recognition is used in criminology as an identification examination using memory traces. Recognition is a form of forensic identification that is based on the psychological process of re-recognition. The essence of re-identification is the psychophysiological processes taking place in the human brain, enabling the memorization of the perceived, equipment of the previously perceived object and the comparison of this "image" (idea) with the current perception of the presented object. At the same time, the displayed objects are excluded or identified.

The peculiarities of the form of recognition - identification by reconnaissance (as opposed to expert identification) can be considered in particular:

- irreplaceability of the subject of identification (the subject can only be a person who perceived the presented object in the past),
- identifying objects are the memory trace of the previously perceived and the current perception of the presented objects,

- non-repeatability of the action, if the identification person has already identified the identified object.

In view of the existing methods of identification research, we would like to propose a new view of the methods of identification research, the essence of which is expressed in the following diagram (Fig. 1).

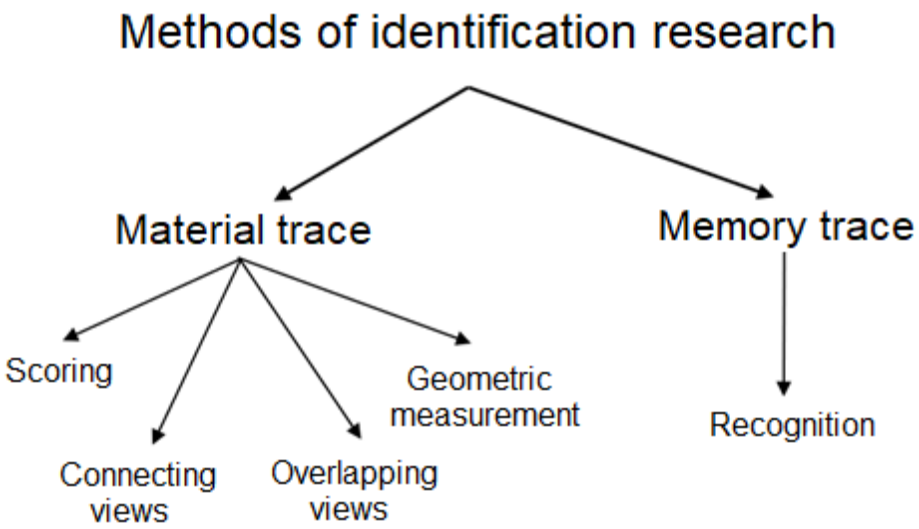

Fig. 1 - Scheme of methods of identification research (Straus, Porada).

In criminalistics we can talk about identification and non-identification research. Identification research leads to the identification of an object that will create a criminal record. In such a case, it is necessary to have a secured criminal record and at least one comparative material and the task is to identify the identified object. The forensic-technical significance serves primarily to ensure that the clue can be used in the process of forensic identification and subsequently allows to identify the person, thing or animal that created a particular forensic clue. Such a result is usually crucial to clarify a forensically relevant event. It should be noted that not all forensic traces have the necessary and required forensic technical significance (value) and are often not fully usable in the process of forensic identification, eg traces do not contain the required number of individual identification marks or these signs are not sufficiently clear and unambiguous in the process criminalistic identification [11].

By identification level we mean:

- individual identification of the object (identification or exclusion of identity)
- finding out the group affiliation of the object when the individual identification process is not completed.

Non-identifying research does not lead to identification (nor to the determination of group affiliation) and is used in cases where, for example, it is necessary to determine the authenticity of an object or to obtain information about a specific object of research. As an example of non-identification research in criminology, we can mention the following - determining the authenticity of the banknote, determining the firing distance according to post-fire fumes, determining the ability of the weapon to fire, determining the mechanism of forensic evidence. We believe that non-identification research leads to the determination of the forensic tactical value of the track. The forensic-tactical significance lies primarily in the fact that the forensic footprint provides important information about the manner of conducting a forensically relevant event, about the persons who participated in it, their activities, the manner of performing the act, their physical, or. and psychological abilities, the subject of interest, the method of arrival and departure from the place, etc. other knowledge and skills needed to overcome various obstacles, whether he was preparing for his actions, whether he had companions, how he behaved on the spot, what was of interest to him and other forensically relevant information. Every forensic footprint always has a forensic-tactical significance, regardless of its possible forensic-technical significance. The use of forensic-tactical value is in the process of assessing and forensic use of the method of committing a crime (forensically relevant event) [11].

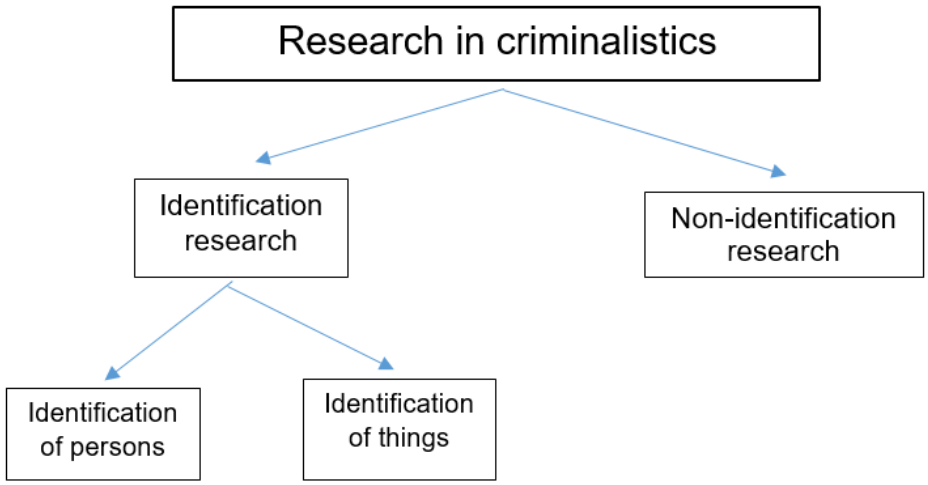

Fig. 2 - Scheme of research in criminalistics (Straus, Porada).

Non-identifying level means finding:

- groups of solids, liquids or gases, if the goal cannot be individual identification
- mechanism of traces (eg that the grooves in the lock were caused by a key or a false key)

- the mechanism of the crime (eg the victim was killed elsewhere and transferred to the scene)
- authenticity of the object (eg whether it is a genuine or counterfeit note)
- the manner in which the crime was committed (eg that there were several offenders, that they acted brutally, that they used a motor vehicle, that they slept at the crime scene)
- what object it is, what it is used for, or can it be used for (eg whether a home-made firearm is suitable for firing and can kill or injure a person)
- circumstances that helped to commit the crime and the motives to commit the crime (eg that the person who was robbed before himself boasted in the inn how much money he had, that the warehouse from which the goods were stolen was not provided mechanical or other barriers).

Opinion on the inclusion of vehicle identification in forensic identification

In a professional communication (Kopencová, Rak, Hudecová [13]), it is stated:

"Individual object identification is the initial or final state of any forensic analysis or documentation". The article acquaints the reader with a new method of vehicle identification, which can be used to find stolen vehicles, respectively. unprofessionally interchanged key vehicle components that may also come from crime.

In order to be able to use individual identification of any objects (persons, living and non-living objects, artifacts created by nature or man) in forensic disciplines (including criminology), we need to fulfill several theoretical and purely practical basic principles. These are essential principles and additional principles.Jsou uvedeny zásady nezbytně nutné:

1. **The identification characteristics (properties) of the object in question must be unique in a certain researched area**. In the time of global globalization, the studied space is the entire planet earth, ie the object must have such characteristics that ensure its global uniqueness, uniqueness, uniqueness [14].

2. **The identification characteristics of the object must be relatively constant**. They may therefore vary to some extent, but the previous principle must not be violated. The changes are therefore small, insignificant for the identification process, guaranteeing a clear, unique match between the compared objects. The fingerprint of a small child and the same adult person has different dimensions, but the identification marks (so-called markers) are unchanged. Relative immutability can also be explained as a certain stability, immutability over time.

3. **The identification characteristics must be inseparable from the given object**, ie it must be an inseparable part of it. In other words, if we mark an object in the production process with a unique identification, production number, this identifier must be a natural part of it. If, for example, the identifier is stamped into the metal of the vehicle body, into a part or part, it cannot be separated in any way. However, if we make the identifier in the form of a certain label (metal, plastic or paper), this

identifier is separable from its associated object, damaged or destructible (by operating the object during its lifetime), fire, exposure to various environmental substances or purposeful interest to destroy the identifier. or exchange for another. Principle 3 is logically linked to and complementary to Principle 2. The identifier in the form of a label or sticker is unique, unique and relatively unchanged (Principles 1 and 2), but if we separate it from the identified object, the object immediately loses these identification characteristics, ie it cannot be identified. Principle No. 3 is important for the identification of natural objects and man-made objects (so-called artifacts).

4. **Identification characteristics must be technologically processable, evaluable**. Thus, there must be certain processes, methodologies, tools, knowledge funds, etc., so that we can find the identification characteristics at all, "make them visible" to the human sense organs, process, analyze, document and evaluate. Ideally, in such a way that this process is repeatable over time with the same result. DNA-based identification has not been possible until recently because the identification characteristics, the essence of the whole identification process, were not known. Once this fact was theoretically mastered, the technology itself was still waiting for practical evaluation and comparison of biological samples containing DNA.

The above principles are essential for forensic identification. In many cases, the speed and cost of processing do not matter so much here (although in practice we are still striving to improve these two factors). Above all, however, the fact of fulfilling the legal basis of the process and justice is important, ie for example, in clarifying murder or other serious criminal activity, society is always willing to spend considerable resources to ensure law and justice.

However, if the identification of objects (persons, living inanimate creations of nature, human creations - various artifacts) is to serve for preventive purposes, prevention or substantial limited certain types of crime, it is necessary to control by identifying a large number of objects in a large area and in a short time. In these cases, it is then justified to define two additional principles for identification processes. The identification characteristics must be "industrial", technologically processable with the following additional principles

5. **Identification characteristics must be processable by publicly available technologies** that are industrially, information standardized on an international scale for the given area. For digital reading of VIN from control units, a standard device should be used, an interface that is usable for all vehicle models of all brands from a certain date of manufacture or the provision of validity of identification checks. At present, each manufacturer uses different, often different standards in the field of digital vehicle identity, and it is necessary to purchase a proprietary system for their forensic or other processing. In practice, it is then not possible to operate dozens or hundreds of technologies used by various vehicle manufacturers for preventive purposes. Such an approach is spatially, temporally, methodically and financially demanding.

6. **Identification characteristics must be processable automatically, in real time, with a minimum share of the human factor**, with the possibility of objective control of the so-called "four eyes". This is the only way to ensure the objectivity, speed and independence of the whole process.

For natural objects (humans, animals, plants, etc.), the unambiguous, unique and primary identity is basically given primarily by their natural, native origin, ie biological properties (fingerprint, DNA, odor, facial appearance, etc.).

Unique, unique identifiers can be divided into primary unique **identifiers and secondary unique identifiers.**

Primary unique identifiers usually arise during the birth (creation / creation) of a living or non-living natural object or the creation of an artificial object by humans (ie the creation of an artifact).

● **Primary unique identifiers** are relatively fixed over time and permanently associated with an object, and even if a part of it is separated from the object, that part is usually ideally able to identify the original object. Examples are DNA, odor, etc. Primary unique identifiers can always be found in all objects of the same category around the world (ie all persons have DNA, fingerprint, face, vehicles manufactured after 1986 VIN - Vehicle Identification Number).

● **Secondary unique identifiers** are created during a certain process, during the "life" of the object. Although they are individual, they may not always be found for all objects in a given category. For example, if people have unique, unambiguous tattoos, unique properties of teeth after dental treatment, etc., this does not automatically mean that this applies to all people on planet Earth. Secondary identifiers help to uniquely identify them, if any; they are often called auxiliary unique identifiers. Because secondary identifiers are often created retrospectively, one uses them to identify the various artificial artifacts created, and their permanent connection to the object from the very beginning to the end of its existence may not be guaranteed. Secondary identifiers can be removed from an object by certain technologies.

In practice, artefacts tend to use secondary identification, which is artificially created by man - especially various production, registration, administrative, official numbers, etc. They can take the form of paper but also computer chips. But even artifacts have properties that are given primarily in the process of their production (ie birth) - certain stresses in the material, specific material composition or characteristics, etc. If these properties of artifacts are permanent and relatively unchanged and have the character of unique identifiers, they can be used as primary unique identifiers '.

In view of the above principles of the theory of criminalistic identification, we are interested in the following opinion on this communication:

The issue of Forensic Identification of vehicles was included in Chapter 6: Forensic-technical methods of identification of persons and objects and non-identification research, in subchapter 6.2.5, within forensic methods of identification of things [14]. Thus, the issue of Criminal Identification. However, this issue is included in Criminalistic Identification of Things, and even among Non-Identification Investigations in Criminalistics, where the issue of metallographic examination of defects and detection of numbers and marks removed from the surface of metal objects, such as counterfeit engine numbers and later the VIN does not belong. For several reasons. We will only briefly state:

a) Criminalistics has, as stated its own methodology and a system of criminological-technical and tactical methods, means, procedures and operations

derived from it. It uses general methods of knowledge. These are the so-called theoretical sciences (so-called pure or fundamental) and specific forensic-technical means. These methods are part of the methodology of the so-called theoretical (so-called fundamental) sciences. And from their own, specific forensic-technical methods.

b) The authors of this communication work with artifacts, ie from the special methodology of practical sciences, ie sciences that are defined as artificial sciences (artifacts), acting and design, which is the main procedure of practical sciences (Fig. 3) [16]. We understand artificial (artifact), like any product of purposeful human activity, more precisely a product whose essential condition of existence is purposeful human aktivity [16].

Sciences		Target	Criterion	Value	Answer to the question
Theoretical	- pure sciences - fundamental sciences	Explaining the facts	Empirical feasibility	True - False	What is it and why is it ?
Practical	- activity design sciences - activity technology	Designing effective behaviour	Achieving "the best state of affairs"	Correctness Incorrectness	What should it be and how to achieve it most effectively?

Fig. 3 - Differences between theoretical and practical sciences (Porada, V.et al. 2017, pages 94).

For these reasons, it is necessary:

1. Change the incorrect classification of **Vehicle Identification into the issue of criminalistic identification,** to which it does not belong,
2. The 2nd sentence: "For the possibility of using individual identification of any objects (persons, living and non-living objects, artifacts created by nature or man) in forensic disciplines (**including criminalistics) - remove this possibility**).
3. **Vehicle identification**, to include it as a full-fledged and important part among the chapters of Forensic Expertise entitled: **Forensic vehicle identification**, as an integral part of Forensic Engineering (Porada, V. et al. 2016, 2019).

Note: If the authors refer to criminalistic in the text, we recommend distinguishing the rules of criminalistic identification from forensic identification research.

Conclusion

The theory of criminalistic identification is a teaching about the general principles of identifying various objects according to their reflections, in order to obtain criminal and other evidence. The basic starting point of criminalistic identification is the theory of interaction applied in the theory of criminalistic traces. From this theory, he uses the criminalistic thesis that the material objects involved in the crime act on its surrounding external environment during the crime - it is reflected, which causes a certain change in it - a reflection. Forensic identification is a process during which it is determined which specific object created a particular forensic trace. It is a process of identifying objects according to forensic traces and other depictions, in which the connection of a person or thing with a forensically relevant event is sought.

Minor differences in the methods of identification research can be found in the professional literature, and there is also inconsistency in the concept of identification and non-identification research. Sometimes the theoretically correct determination of criminal identification is confused and, in addition, the concept of verification

We propose an extension of the methods of identification research not only according to material traces, but also according to the memory trace.

The definition of identification and non-identification research plays an important role. Identification research leads to the identification of an object that will create a criminal record. In such a case, it is necessary to have a secured criminal record and at least one comparative material and the task is to identify the identified object. Non-identification research does not lead to identification (nor to the determination of group affiliation) and is used in cases where, for example, it is necessary to determine the authenticity of an object or to obtain information about a specific object of research.

For the above reasons, we recommend removing vehicle identification from the issue of criminalistic Identification of the case and we recommend including it in the issue of forensic disciplines, such as "Forensic Vehicle Identification". The crucial importance of this expertise must be emphasized quite objectively, especially in the investigation of motor vehicle thefts, where it has a major impact on the success of the detection and investigation of these crimes.

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