

P. Y. Antonyuk, *PhD in law, professor of
criminalistic and forensic department of the
National Academy of Internal affairs*

SPECIAL QUESTIONS OF INTERACTION OF NATIONAL POLICE DEPARTMENTS OF UKRAINE DURING THE CRIME SCENE EXAMINATION ON THE FACT OF HUMAN DEATH

The process of investigating crimes is always a complex, long-term, which includes many entities with the power granted to them. Performing their duties at each stage of establishing the truth, the entities enter into forced or conscious relations between themselves, that is, interact.

If we talk about the procedural form of interaction, then its effectiveness directly depends on the legal regulation of such activities, the presence of a well-defined algorithm for all entities included in the process of crimes investigation.

It is the normative separation of functions, competences and powers between the parties, involved in procedural activities, to avoid conflict situations from the point of view of their impact on the effectiveness crime's investigation process and ensuring the results receipt of such activities without violating certain criminal process principles. Particular importance of observance of such a requirement takes place during investigation (search) actions aimed at the search, identification and gathering of evidence, in particular - during the crime scene examination of a person death.

The analysis of statutory documents shows that in existing statutory acts there is no competence delimitation of employees directly during the commission of practical actions aimed at conducting a corpse examination, such as: traces removal of a criminal offense from the corpse itself (parts of the corpse). In addition, the edition of the available documents, in our opinion, has the nature of methodological recommendations, which does not entirely correspond to the nature of statutory acts,

and does not establish clear authority of specialists when working with certain types of evidence.

The analysis of statutory acts made it possible to state:

- the Legislator clearly delineates the human body as an object of examination from other objects of the inspection, including the place of the event;

- the Legislator determines only one compulsory specialist as a carrier of special knowledge for the examination of the corpse - specialist in the field of medicine (forensic expert or doctor);

- the Legislator clearly points to the further "procedural status" of the corpse, whose review is conducted - the object of expert examination;

- the Legislator does not establish clear authority for working with evidentiary information of different nature for law enforcement officers and employees of the Ministry of Health institutions.

Regulatory uncertainty of certain issues of subjects interaction during investigation (search) activities, in particular, the review of the crime scene on a person death and the corpse examination, in conjunction with the modern problems of technical and forensic provision of pre-trial investigation, lead to investigators' methodological mistakes during the specified Investigative (search) actions that may have a negative impact on the subsequent investigation process.

It is the order of the investigator-inspector-criminologist (criminologist) to remove trace information from the corpse during the examination: nail plates or their parts, hair, the contents samples of the oral cavity, washings from the palm of the hands, etc. Such orders are argued by the provisions of the abovementioned departmental orders, the procedural status of the investigator as the investigation subject and the specialist as a participant in the criminal proceedings.

In our opinion, such practice is false, methodically incorrect and leads to irreversible consequences.

To promote the proper organization of all participants interaction in the review of the crime scene on a person death, in our opinion, not only awareness of all the subjects' methodical principles of the use of special knowledge in the pre-trial

investigation, but also clear legal regulation of competence, authority and order of their implementation, all participants of the relevant investigative (search) actions.

V. M. Atamanchuk, *PhD in law, head of the criminalistics and forensic department of the Educational and Scientific Institute №2 of the National Academy of Internal Affairs*

O. V. Vorobei, *PhD in law, docent, professor of the criminalistics and forensic department of the Educational and Scientific Institute №2 of the National Academy of Internal Affairs*

**ZINAIDA MELENEVSKA - WELL-KNOWN FORENSIC
SCIENTIST, A LEADING HANDWRITING EXPERT AND
HIGHLY QUALIFIED SPECIALIST (TO THE 80TH
ANNIVERSARY FROM HER BIRTHDAY)**

It turned 80 years from the birthday of the famous forensic scientist in the field of forensic handwriting, Z. S. Melenevska. More than 40 years of practical experience and scientific talent allowed Z. S. Melenevska to become one of the leading specialist in the field of forensic handwriting in our country. Until now, handwriting experts, young scientists, students of the different universities refer to the great scientific heritage of Z. S. Melenevska. Moreover, everyone has the opportunity to find original solutions to current problems.

A range of science interests of Z. S. Melenevska concerned mainly forensic handwriting questions, but there were also scientific articles in the theory of forensic science, as well as about the issues of psychology and graphology in the study of handwriting.

Zinaida Semenivna was born on January 30, 1938, in Kyiv, in the family of employees. In 1956, after graduating from the school, she entered the law faculty of the Kyiv State University of Taras Shevchenko, which graduated with honors in 1961. After graduating the university, she began working under the distribution at

the Kyiv Scientific Research Institute of Forensic Expertise of the Ministry of Justice of Ukraine. Diligence, high intelligent skills, the pursuit of perfection allowed her to adequately pass the labor path on the posts of the junior researcher, senior researcher, academic secretary of the institute, head of the laboratory of forensic handwriting researches of the KSRIFE.

In September 1972, she defended the dissertation for obtaining a PhD degree in law on the topic: "Theoretical and methodological issues of repeated handwriting examinations production in criminal proceedings". In 1977, according to the decision of the High Appraisal Commission under the Council of Ministers of the USSR, Z. S. Melenevska was assigned the academic status of Senior Researcher. She received a higher class of forensic expert and the fifth rank of the civil servant.

From January 1998 to December 2003, the well-known researcher led the scientific activity of the KSRIFE as the first deputy director. The great practical experience allowed the scientist to prepare manuals and methodological recommendations, which are still invaluable for the experts of handwriting: "Samples of expert conclusions: Forensic handwriting" (1995), (co-authored); "Forensic Signature Research" (2006) (co-authored); "Expert's conclusion examples in the solution of handwriting problems: methodical recommendations" (2007), (co-authored); "Forensic handwriting examination: in two parts (general and special)", (2007), (co-authored).

From 2004 till 2015, Zinaida Semenivna had worked in the Educational and scientific training institute of investigators and criminalists of the Kyiv National University of Internal Affairs (now the Educational and Research Institute № 2 of the NAIA) as a professor at the Forensic Examination Department. During her activity in the ERI №2, Z. S. Melenevska spent a lot of efforts and energy for science, theoretical, methodical works and the vast majority of time shared her rich experience with other youth students.

Professor Z. S. Malenevska made a great contribution in the preparation of highly qualified staff - forensic experts for divisions of forensic services of the MIA of Ukraine. Cadets and students of the university are very grateful for enthusiasm

during the lectures and the most interesting seminars practical training of "Forensic handwriting" and "Handwriting research" disciplines. They really appreciate for essential practical knowledge and opportunity to hearing useful information for future carrier.

Her lectures had unique depth, close connection to the practice, sequence of material presentation. Fascination, cheerfulness, sincere and sensitive attitude to cadets and students allowed Z. S. Melenevska to become a favorite mentor for many graduates of the National Academy of Internal Affairs. Her work curriculum development, lectures, abstracts, and test assignments are still used during the preparation and conducting of studies in the Educational Research Institute № 2 of the NAIA.

For more than half a century of her research and teaching activity, Z. S. Melenevska made a significant contribution to the development of the forensic science and forensic examination, as well as the training of forensic experts.

Zinaida Semenivna Melenevska - is a brilliantly erudite, inquisitive and friendly person, a wonderful woman and a famous forensic scientist. She left a great scientific heritage and a bright memory for all who knew her.

*A. V. Bodnar, candidate of the Educational and Scientific
Institute №2 of the National Academy of Internal Affairs*

PARTICIPATION OF AN EXPERT IN THE EXAMINATION OF THE CRIME SCENE DURING THE CRIMINAL OFFENCES INVESTIGATIONS CONNECTED WITH THE DAMAGE OR DESTRUCTION OF PROPERTY

The relevance of the article is determined by political and social environment during the recent years in Ukraine. Events, connected with the Revolution of Dignity, which were accompanied by destruction and damage of the public and private property, serve as a demonstrative example.

In the case of criminal offences related to the destruction or damage of property (as opposed to other types of crimes), on the crime scene there are usually

evidences of such kind of offence, for example: undestroyed parts of the property, microparticles of destroyed property, tools of destruction, burn patterns, evidence of a flooding or dissolution, etc.

Intentional destruction or damage of someone else's property is a criminal offence against property and is one of the most dangerous criminal offences, the share of which in the overall structure of crime remains significant. Often, such crimes committed by an arson, an explosion or other dangerous way and cause people's deaths.

The examination of a crime scene, which should be performed with the participation of an expert with a special knowledge, is one of the efficient ways of collecting evidences by the parties to the criminal proceedings. An expert can be involved for providing direct technical assistance, such as photographing, drawing up of schemes and plans, technical drawing, selection of samples for examination, etc. by the parties to the criminal proceedings during pre-trial investigations and during judicial inquiries.

Criminal proceedings against intentional destruction or damage of someone else's property are quite difficult both in terms of the legal analysis and in the conduction of pre-trial investigation. This is largely due to the nature of the methods of dealing with destructive processes that cause the destruction of a large amount of traces of a criminal offense, the difficulty of conducting separate investigative (search) actions, etc.

The examination of the crime scene is an essential part of the investigation procedure and plays a significant role during in the uncovering and investigation of the researched type of crime. However, despite the rather elaborate development of the investigative inspection tactics in forensic science and practice, the significance and opportunities of the inspection are often underestimated and conducted superficially, hastily or simply formally, and crimes remain undiscovered.

An expert, who works as a part of investigative group, must have at his disposal a set of necessary technical means for documenting the crime scene, detecting, fixing, extracting and packing investigative and other important forensic information. Usually forensic experts use the technical means available in specialized forensic kit suitcases.

Before heading off to the crime scene, forensic expert receives information about the case from the investigator (what property is damaged and in what way, the location of the examined property, the consequences of damage or destruction) and decides, what kind of additional technical means he might need for the crime scene examination (additional means of lighting, packaging, self-protection, fencing, additional power supply, etc.). If at the preparation stage, it becomes known that there may be other consequences caused by damage or destruction of the property (fire

spread, water pollution, possibility of an emergency during traffic, etc.), forensic expert may suggest involving experts from the other fields of science, such as technology, arts, crafts, etc.

If there is a need for movement of the experts, witnesses or other participants of the investigation directly through the examined area of crime scene, then the tracks for movement are determined and fixed.

Taking photos is the most widespread type of documentation of the crime scene.

Special attention should be paid to the shooting of the crime scene under bad weather conditions (rain, snow, fog, etc.) or when the consequences of property damage or destruction are still in progress (fire spread, water pollution, etc.). Taking into account the possibilities of the modern photo-equipment, an expert should not neglect to shoot the same object or area several times.

For the stage of general examination characteristic static and general methods of examination, for the stage of detailed examination – dynamic and detailed methods. In general, it is advisable to use an integral method, as some of the evidences may be lost when using the sampling method (which is why it is considered less effective).

Volobuiev Anatolii

Proving the guilt of participants in a road traffic accident, as the implementation of the principle of the inevitability of punishment

Annotation. The article reports that during recent years, Ukraine has become leader among the other European countries in terms of the number of people who die every year as a result of road traffic accidents. The state leadership is trying to solve this problem by increasing the punishment for violating the rules of the road. Although it is clear, that the most effective ways of preventing such crimes is inevitability of punishment rather than its strictness.

The attention is also drawn to the fact that in forensic literature on the investigation of road traffic accidents, the issues of realization of the principle of inevitability of criminal liability for all participants, which allowed one or another traffic rules violation, in car accidents are not actually considered. There is a formal rule for the most cases – person, who is the first to violate the rules, is guilty of the road traffic accident. However, the materials of criminal proceedings indicate that the most car accidents occur as a result of the mutual guilt of several vehicle drivers.

A road traffic accident is a consequence of a certain violation of the established traffic rules or operation of transport vehicles in the "driver – vehicle – road – environment" system. Usually it is drivers who violate the rules, what leads to car accidents. To determine drivers' scope of guilt – it is proposed to analyse the actions of all drivers who violated traffic rules, pointing out the following phases of car accident dynamic:

1) Initial phase is characterized by the motion parameters of the participants' vehicles (speed, vehicles moving in the same direction, traffic condition, clear view, etc.);

2) Dangerous phase arises at the moment of objective danger for the further movement – the moment of the appearance of a certain obstacle (an emergence of the pedestrian on the roadway, an abrupt slowing down of the vehicle moving ahead, sudden vehicle breakdown, etc.);

3) Emergency phase begins when there is no technical possibility to prevent an accident and it becomes inevitable;

4) Climax phase begins with the first physical contact of participants of the movement (vehicles, pedestrians, passengers) and lasts until they are separated.

5) The final phase is associated with the detachment of a vehicle from an obstacle or another vehicle and lasts until they completely stopped.

In the view of the above-mentioned, it is important to pay attention during the specification of suspects not only to the driver, who obviously seriously violated the rules of the road safety and directly contacted with the victims, but also to analyse the actions of all drivers – participants of the accident. Particularly, during the pre-trial investigation and legal proceeding, it is necessary to carefully investigate the real possibility of assuming measures to prevent car accidents and the occurrence of socially dangerous consequences.

Key words: road safety, road traffic accident, mutual guilt of several drivers, measures to prevent an accident, inevitability of punishment.

УДК 343.983:7.11

N. M. Volianiuk, forensic expert of the informational technology research sector of Lviv Scientific Research Forensic Centre of the Ministry of Internal Affairs of Ukraine

Attribution of folk embroidery on the ground of technologic approaches of execution (based on the materials of Ternopil region)

The article covers the issue of conducting artistic researches of folk embroidery. The article outlined the period of the existence of different embroidery techniques, defined local embroidery technological peculiarities, systemized embroidery technics according to the types and ways of execution, and clarified their influence on the artistic value of embroidery handiwork.

Keywords: arts and crafts, attribution, folk embroidery, techniques, materials, ethnographic features.

Folk embroidery in the nineteenth and twentieth centuries was the most popular form of folk art throughout Ukraine and became the heritage of the spiritual and material culture of the Ukrainian people. Embroidery items, for example, well-known “Borshchiv Embroidery”, are in great demand among art lovers and collectors nowadays. In the conditions of historical and cultural development and ethnographic zoning, as well as the influence of folk art of neighbouring countries, Ukrainian folk embroidery characterized by rich artistic and stylistic features and varied by techniques of decoration, colour, ornamental motifs, etc. Therefore, in the current demand for the folk art products, in particular for embroidery, has increased the need for art researches of attribution of folk’s embroidery. The relevance of the topic is determined by the fact that the research of the materials used for embroidery and techniques of embroidery are sound arguments in establishing of the creation period of the researched object, its stylistic features, which are chronologically different, as well as its ethnographic belonging.

An art expert begins to research the attribution of embroidered items, from the visual analysis, making assumptions about the originality of the item and probable place and time of its creation. Then the expert determines the preservation degree of the embroidery, which in its turn is an important aspect of determining its artistic value. During the identifying of the researched embroidery value, an art expert determines techniques, used to produce embroidery, level of its complexity, materials for the products’ manufacture and decoration. The expert’s knowledges of the materials’ specifics and additional substances (for example, dyes), which were used

by artists in a certain historical period, makes it possible to avoid a number of mistakes during attribution of a researched embroidery.

The article's purpose is to ascertain the role of techniques and materials for the art research of folk embroidered objects, cover popular and local techniques of embroidery, systematize them by the types and methods of embroidery, outline the chronological usage period of various embroidery techniques.

During the twentieth century folk artists used a wide range of embroidery techniques to decorate clothes and home textile that largely predetermined the artistic expression of embroidery. While comparing embroideries from different regions, one can conclude that due to the application of certain seams or their combinations, the features of local, regional and common to all Ukraine originality of folk embroidery were formed. Embroidery techniques and stitches performed various functions in the fabric decoration, also, the choice of technique largely depended on the material, the cut and the purpose of the item. Currently this information is of great importance for the attribution of researched objects. The discovered techniques remained common used till the end of the first half of the twentieth century. Since the second half of the twentieth century the cross-stich technology has become classic. Since 1980, archaic techniques have gradually begun to return to folk embroidery, but under the influence of strong diversity of folk particularities, the regional and local features of folk embroidery have not been restored.

Perspectives for the further research in this field are the studies of color, ornamentation, local embroidery technique and embroidery techniques of significant ethnographic regions, such as Volyn, Podillya, Polissya and others.

L. V. Dombrovskiy, *deputy head of the department,*
postgraduate of the department of the Kharkiv Scientific
Research Forensic Center of the MIA of Ukraine

S. O. Ihnatieva, *forensic expert of the Kharkiv Scientific*
Research Forensic Center of the MIA of Ukraine

DIGITAL FILES ATTRIBUTES INVESTIGATION FEATURES OF VIDEO AND SOUND RECORDINGS

Nowadays, in Ukraine, the video and audio forensic examination solves the urgent issues related to the research of digital video files, sound recordings: with the help of which a digital video and audio recording device recorded information; is it possible to record a file submitted for research on the provided video and audio recording device; whether there are any signs of making changes in video, sound information; authentication of digital video and audio recordings, as well as many other diagnostic, identification and classification issues.

The chosen topic urgency is caused by the rapid development of digital technologies. A wide selection of video, audio recordings with a variety of digital formats, compression algorithms and many features is needed for the general public which requires the use of theoretical and practical knowledge and skills from forensic experts, increased attention to the digital technologies development and the continuous improvement of existing research methods.

An in-depth analysis of the digital video and audio files attributes enables forensic experts, with a small amount of expert tools and software, to reproduce the information about a digital video and audio file and technical means of capturing the provided information.

When investigating the digital video and audio recordings attributes, the expert has the opportunity to analyze whether the changes recorded in the file were made,

whether the information was not subjected to conversion, editing or other changes.

The practical experience of expert work shows that the study of the digital video files and sound recordings attributes is important both in implementation the of digital video files and audio recordings installation, and in the authentication of digital video files and sound recordings.

*V. V. Darahan, PhD in Law, assistant professor
of criminal investigation department and faculty of
training specialists for criminal police divisions
of Dnepropetrovsk State University of Internal Affairs*

THE NEED TO CREATE NEW METHODS OF EXPERT STUDIES DOCUMENTS RELATING TO THE IMPLEMENTATION OF PUBLIC PROCUREMENT IN UKRAINE

One of the most powerful tools of the economy state regulation and the social tasks fulfillment is the system of public procurement. The functioning of almost all state bodies, enterprises, institutions and organizations depends on the established mechanism of public procurement. The criminalization of this sphere threatens not only its economic security, but also the economic security of the state as a whole.

Difficulties in identifying and investigating crimes in public procurement are that a significant number of traces, which indicate their commitment, are not available to direct perception. There is impossible to identify such traces, to establish their belonging to this type of criminal activity, to identify and record evidence without the use of special knowledge.

At the present time, the Register of methods for conducting forensic examinations has registered more than 70 methods for economic examinations, meanwhile experts use the following methods for economic examinations during criminal proceedings in cases involving crimes in public procurement: Methods, methods and techniques that are used in conducting forensic examinations; Methodology of investigation by the forensic economic examination of the budget funds misuse issues; Methodology of solving by the forensic economic examination of the causing material damage issues; The expert study methodology of the use of budgetary funds for the purchase of goods, works and services.

Furthermore, it should be noted that these methods were developed on the basis of statutory acts in force at the time of their creation, and in their content sometimes do not correspond to new tasks that are put on the expert's solving. If there are practically no questions about the first three methods when conducting expert studies, then the expert study technique of using the budget funds for the purchase of goods, works and services is impossible at all, because the indicated methodology was developed and adopted in 2005, and since that time the statutory framework for public procurement in Ukraine has changed significantly.

The research results let to come the conclusion that nowadays there is a need to improve the methodology for conducting an expert study of using the budgetary funds for the purchase of goods, works and services, as well as to develop and adopt a methodology for determining the amount of damages caused by customers in the event of their non-compliance with the requirements of legislation in the field of state purchases.

*O. I. Izotov, PhD in law, docent, lecturer
of the military prosecutors training and
qualification department of the National
Prosecution Academy of Ukraine*

MEDICAL AND FORENSIC SIGNS OF SPECIAL PURPOSE CARTRIDGE DEFEAT

A particular importance among the criminal offenses become the acts committed with the use of firearms, which often cause significant material damage and get broad public response. This issue has become particularly relevant in recent years, when the illicit trafficking in firearms associated with military actions in the Donbass has considerably increased. It should be noted that the variety of models and types of weapons, as well as ammunition to it, used for criminal purposes on the territory of Ukraine, also sharply increased during 2014-2017. Therefore, forensic experts in the gunshot injuries investigation have to deal with injuries that are not typical of ordinary bullets, which can deceive even experienced experts. Thus, in 1998, a forensic expert, with 20 years of experience in Orekhovo-Zuievo region

(Russia), discovering in a body a dead core of a special bullet of 5.45 mm caliber, decided that the shot was made of a self-shotgun charged with a piece of nail. It turned out that he did not have to see not only a similar core, but just a shotgun of this type. Special purpose cartridges differ from other ammunition precisely by their diversity, which depends on the purpose, and they can be used not only in special small arms samples, but also in all kinds of shooting devices, even in improvised weapon. They differ in design and size from ordinary ones, but they may be present in separate elements of standard ammunition.

It should also be noted that, because of the low prevalence of such ammunition and the secrecy requirements in the forensic medicine textbooks, the issue of defeat by special purpose balls is not sufficiently highlighted, and in some cases, they even contain false statements.

The article purpose is to consider certain medical and forensic aspects of the recognition of defeat by special purpose balls signs for using in the specific sphere the disclosure and investigation of criminal offenses.

P. P. Kanivets, *postgraduate of the department
of the Kharkiv Scientific Research Forensic Center
of the MIA of Ukraine*

R. V. Kravchenko, *chief forensic expert
of the Kharkiv Scientific Research Forensic
Center of the MIA of Ukraine*

THE INFORMATION USAGE ABOUT THE AVERAGE PERIOD OF THE PROPERTY SERVICE DURING THE TRADE ANALYSIS

The target of crime in the commodity study is a large list and a wide range of goods that were mostly used. The only methodological approach that would cover the

definition of wear and tear of this range of goods and conform to requirements of the authentication in determining a market value has not been developed in expert practice.

On the basis of the above-mentioned in this article, the possibility of using the method of determining the quality deterioration (wear) of the property (because of exploitation) through the average period of its service is considered. In order to feasibility of using the idea of applying the average lifetime in determining the market value of property during the conduction of commodity expertise, the stages of determining the value are considered. The main methodological approaches that apply for this Methods of setting the size or the dimension of the quality deterioration (wear indication) of the property.

In the article, it is considered the main problematic issues intended forensic commodity expertise, and their solution targeting by the proposed property lifetime method application. This method provides the following: for a research object, that haven't been in the standard service, the wear decides as a ratio of the actual lifetime on its standard value.

Specialists in questions of forensic commodity expertise of the Kharkiv Scientific Research Forensic Center of the Ministry of Internal Affairs of Ukraine in their work are guided by the acquired experience, independently study the new goods appearing on the market, and conduct the collecting and synthesis of statistical information.

Based on the circumstances given above, we consider the expedient introduction in the expert practice a method of using the average period of a property service when conducting the forensic commodity expertise.

*N. I. Klymenko, doctor of law, professor,
professor of the criminal law, proceedings and
forensic science department of the European University*

PRINCIPLES, FUNCTIONS AND OBJECTIVES OF THE FORENSIC EXPERTOLOGY GENERAL THEORY

A principle is the basic law of any theory (science, doctrine, etc.), which in form is a certain generalization of knowledge. The principle, defining the main content of the theory, is at a higher degree in its structure than the main concepts, judgments, laws that depend on the basic principle of the theory.

The law is a form of principle. Laws characterize scientific principles in relation to certain activities.

The principles of forensic expertology were initially attributed to:

- the principle of optimal using of all the evidence in the object;
- the principle of complexity, which during the object study combines the necessary set of modern methods and technical means in accordance with the requirements of scientific and technological progress.

Over time, other principles were distinguished, with the inherent methodological and logical features:

- getting on the basis of special knowledge the criminally relevant information and its recoding into an accessible evidence form for the addressee;
- optimal using information about the crime during the development of the expertology scientific basis;
- consolidation of the general theory provisions of forensic examination and forensic expert knowledge branches on the basis of the expert analysis methodology of various types of crimes.

It is clear that the principles of forensic examination should not contradict the principles of its maternal sciences, that is, they must be common to all the knowledge that is integrated; these are the principles of determinism, historicism, objectivity, universality and scientific validity, the legal field of an subject and objects.

Forensic scientists distinguish methodological, practical, and prognostic functions of the general theory of forensic expertology.

Various scientists add to the specified ones other functions: adaptive, educational and methodical, synthesizing, and explaining.

Expert tasks play the determining role in forensic expertology. The characteristics of these tasks are their prognostic orientation, the connection with the people practical activities and the needs of investigative and judicial bodies. These

tasks solving becomes possible only if different methods of research (natural) and the nature theoretical explanation of these or other phenomena are used.

Both the goals and the tasks of forensic expertology influence on the choice and using the methods of various sciences in expert practice. The content of the expert task of forensic expertology in one or another way determines the method choice of its solution (it may be one of the expert methods). Even when such methods are few, an expert, depending on the task, uses only those ones that allow to obtain reliable, scientifically-based results.

The tasks classification of forensic examination remains a pretext for scientific discussions. E. F. Burynskyi, who divided them into defined and uncertain, made the first differentiation of expert tasks.

Considering that the task of forensic research is complex and multifaceted concept, different grounds for their classification are used. The most important reason for the expert tasks classification and their delineation is the purpose of the study.

By the end of the 70s of the last century, all the expert tasks were divided only into two groups: identification and unidentification.

At that time, such division was justified, since the primary task was to solve the problems of forensic identification.

Analyzing the correlation between the examination concepts of "subject", "question", "task", it is necessary to understand that the questions and tasks of examination allow to establish its subject, although they are not included in its content.

The important characteristics of expert tasks are their practical orientation, the connection with practical people activities, the needs of investigative and judicial bodies. These tasks solution becomes possible only if different methods of research and theoretical explanation of natural or other phenomena are used.

All expert tasks are divided into:

- the task of the expert field of knowledge, that is, the task of the forensic examination general theory;
- the task of the expert practical activity, that is, the task of expert researches.

The tasks of the expert field of knowledge are divided into general and individual (or special).

In general, the expert tasks are related to the detection and study of the objects qualities and features that allow to establish certain events. Obtaining such information is based on the expert knowledge and skills to correctly select and apply the research methodology and the individual methods or technical means. The choice of research methodology depends on the tasks and features of the research objects.

Over time, scientists offered to divide all expert tasks into:

- identification, diagnostic, situational, classification;

- identification, diagnostic, classification, diagnostic tasks of the state study;
- identification, diagnostic, restoration, situational, classification, etc.

One can agree with the proposed, by the scientists, approaches to the tasks classification that divide the diagnostic expert tasks for classification-diagnostic, self-diagnostic, ambulatory, causative-dynamic, as well as the final, intermediate and auxiliary ones.

*V. V. Kozhevnikov, deputy head of the
forensic types of research of Cherkasy Scientific
Research Forensic Center of the MIA of Ukraine*

*V. V. Aksonov, director of Cherkasy Scientific
Research Forensic Center of the MIA of Ukraine*

TO THE QUESTION OF FINGERPRINTING STUDY OF THE FRAGMENTAL HANDS TRACES

The theoretical features of the microscopic markers structure and properties of papillary lines during the study of fragmentary traces determine the specifics of their practical study taking into account all stages of expert research.

At first, it is an introduction with the materials obtained for research, the objects review, detection and recording of micro-marks. At this stage, it should be noted about circumstances that could cause changes in track information (because of the recording, storage, and packaging).

In the future, an overview of the objects using optical methods is conducted, and determine the location of the traces, which are recorded with a sufficiently large increase.

During obtaining the experimental samples, the expert needs to maximally reproduce the mechanism of the investigated fragmentary trace formation. To do this, it is experimented not only with different surfaces on which traces could be detected, but also with the hands surfaces, by which these traces were left (for example, ones take samples of prints first from dirty hands, and then with washed and dry wiped palm surfaces).

The next and main stage is the analysis of signs, which were reproduced in the traces, and in the prints and their comparison. In practice, the comparison process requires concentration and scrupulousness.

The evaluation of the comparison results must begin with the explanation of the differences, and only then evaluate the coincidence of the signs.

Summarizing the above-mentioned, the authors draw attention to the following:

- in the research of fragmentary traces of papillary patterns of the micro-indications study has an important identifying value;

- - it is practically impossible to completely recreate the process of making the trace of the investigated fragment during the comparative material receipt, as the micro markers undergo significant changes during the tracing process;

- it is impossible to conduct an identification study of a fragmentary trace, regardless of other signs, only on the basis of the smear features, therefore, peredgeoscopy as an independent method of identification is practically not used, since finding the microscopes under study in the experimental traces of a large number of such features is unlikely to succeed.

The authors argue that the practical implementation of the elements considered in this article should have a positive effect on the reduction of possible expert mistakes in the study of fragmentary hands traces, and to improve the quality of such traces study, which in most cases are unjustifiably considered unfit for identification in advance, which in fact excludes the possibility of their further research to identify the person.

A. V. Kofanov, PhD in Law, Ph.D., senior lecturer, professor of forensic examination of the Educational and Scientific Institute № 2 of the National Academy of Internal Affairs

POSSIBILITIES OF USING THE METHOD OF REGISTRATION OF MULTIPLE CORROSIVE RADIATION IN THE FOLLOWING IDENTIFICATION RESEARCHES OF BULLETS AND CASING IN "FOLLOW" AND LABORATORY CONDITIONS

The commission of serious crimes involving firearms presently considering conducting ATO, unfortunately, not uncommon. And the evidence - guns, bullets, shells - are investigated, usually with different modifications comparative microscopes. But this is not enough. Indeed, in 1998 a famous scientist and criminologist Ukraine, Senior Fellow of Research Institute of the National Academy

of Internal Affairs Y. I. Fedorenko to combat crime problems invented a unique device that allows you to work much more efficiently with real evidence.

Indeed, these arguments can determine what kind of weapon was used, and traced its way from the manufacturer to the owner. However, this process is far from simple. Seized from the scene bullets and cartridge cases are sent to regional SRFC where they investigate to determine the characteristics of trails (traces from the inner surface of the bore and the other parts of the weapons). Then check the "repetition" – whether or not the weapons was previously used in the commission of other crimes. If the result is negative, the evidence sent to the State Scientific Research Forensic Center of MIA of Ukraine. This work is complex and time-consuming. For example, the identification liners (balls) spent up to eight hours (in difficult cases, and more), as well as to study the bullets and shells still - has for decades mostly used different versions comparative microscopes (except for "THAIS", "REBOUND"). This error is not excluded as a result of imperfection of the optical microscope system. Also significantly tightened deadlines identification expertise.

The idea to create a device that would help to maximize investigation, was born due to Y. Fedorenko in 1993. Then he worked with sources of nuclear radiation in another area, but decided to try to apply in the forensic field, namely in the judicial ballistics. As a result, he created a technical device, which later became known as "workstations" "KORID" (corpuscular ID). It is an absolutely safe, portable and compact scan-device. Within 15-20 minutes, the computer screen displays a three-dimensional image of the surface of the developed world - and any inspector or police criminalist-expert receives reliable information on firearms that have been used or applied. To use this appliance requires minimal special training.

Currently existing microscopes comparative weighing several dozen kilograms, not compact, not portable and are considerably more expensive. There were some analogues of "KORID" in the world, before the device attracted significant interest internationally. Representatives of one of the developed countries offered the author the right to sell the idea and production of this device.

Prototype "KORID" has been tested in practice. In the 90's Krivoruchko family was shot. To prove the guilt of the suspect seemed very problematic, his removed pistol was antique and the bore had a large degree of wear, the traditional method of research for the gun identification to find the murder examining bullets seemed impossible. Investigators asked the Y. I. Fedorenko to use "KORID" for the identification studies, what has led to strongly positive conclusions.

An interesting detail is also "hidden" opportunities "KORID" to work not only with bullets and shells, but also with other physical evidence - including coins, tools and hacking etc.

So basing on the above-mentioned information we consider it appropriate to study detailed structure, operating principle and features for "bullfighting".

*O. O. Lushchiienko, postgraduate of the
department of Kherson Scientific Research
Forensic Center of the MIA of Ukraine*

FROM THE HISTORY OF DATTYLOSCOPY

The topic "History of fingerprinting", in our opinion, is very interesting and new, because it is practically not investigated in Ukraine, but a lot of information on the fingerprinting formation is outlined in scientific studies of foreign authors. So, the discovery was the monograph "Remote Identification," Jacob Jorgensen, 1922, which is stored in the Library of California University. In this book, the author outlines the basics of encoding fingerprints and fingerprint cards and transmitting them over long distances with the help of a telegraph for identification.

The "One-fingered Identification Guide", edited by J. H. Wegstein, 1969, published by the National Bureau of Standards of the US Department of Commerce is very interesting. The scientific publication contains the first bricks of an automated fingerprint identification system, which we know as ADIS and widely used for fingerprint identification at the present stage of the criminology development.

We specifically recommend paying attention to the documentary story of Viktor Shmakov "System", where as a prologue there is a very interesting statement of the famous person "... there is one in the person who never changes from the cradle to the grave - these are the pads of the thumb .. There are no two people with exactly the same lines ... A fingerprint - this is the only reliable sign ... you do not mask it anymore."

Mark Twain works, especially "Life on the Mississippi", 1882, are popular. In this story, the author proved the difficult process of the algorithm and architecture birth of the modern ADIS, but more about it later ... "History of fingerprinting" is useful for the meaning and experts content - criminologists, students of legal universities, investigators and other categories of forensic knowledge searchers.

*Y. S. Manko, Chief Expert at Sumy
Scientific Research Forensic Centre of the
Ministry of Internal Affairs of Ukraine*

APPEARANCE, ITS FEATURES, ELEMENTS AND TRAITS AS AN OBJECT OF FORENSIC EXAMINATION

Appearance, its features, elements and traits as an object of forensic examination are subject to the article. Herein are – essence and definition of the habitology concept are fully determined, described the following definitions: habitology, feature, trait and appearance and the difference between the terms “feature” and “trait” is defined.

The article classifies “traits” in external and intrastructural. External include anatomic: hight, body, head’s shape, face features, etc. and functional (motoric, linguistic features and behaviour, etc.). Herein is determined the essence of anatomy - science, that studies origins and development of shapes and stature of human body using forensic knowledge.

Observing functional particularities of appearance, the next terms where stressed on: functional stature, linguistics, which are divided into external and internal. Розглянуті мовні особливості, які поділяються зовнішні та внутрішні.

The article gives an example of scientific research from the Institute of Engineering and Technologies Vidya Vikas (Karnataka State, India), which considers human pace to be equally individual with fingerprints. The example lies within the following – data, which allows to outline human pace features, is received from the CCTV monitoring. This data is transformed into digital model, which will further be processed through statistic analysis, taking into account the hight of feet raising during walking, the frequency of steps and swing amplitude of hips and shoulders.

Another important feature is non-verbal communication – mutual information exchange through transmitting messages of non-verbal means of communication. Herein is explained the term “proxemics”, considered by Khmilyar O. F. in a structure of non-verbal communication.

The definitions of terms “kinesics”, “element”, “face”, “physiognomy” are given.

Appearance elements are characterised as an object of forensic examination.

In conclusion, author mentions that appearance is a complex of human features, elements and traits. Forensic study on appearance is called habitology or gabioscopy, based on anatomy, physiology, psychology, sociology and forensics itself. Each person has approximately the same complex of appearance elements, peculiar for its biological specie, which have individual peculiarities, characteristics

due to internal and external factors. This is what exactly helps to identify a person in the crowd.

*K. O. Myronova, senior forensic expert
at Luhansk Scientific Research Forensic Center
of the Ministry of Internal Affairs of Ukraine*

SPECIFICS OF THE HANDPRINTS FORMATION MECHANISM DURING MECHANICAL INTERACTION OF CONTACTING SURFACES

Every crime causes changes in the environment. Evidences of crime can indeed depict the process of committing a crime and/or its participants, therefore their role in disclosure, investigation and prevention of crimes is extremely important. Forensic science calls evidences – traces of crime, and the process of their appearance – formation mechanism.

By its forensic significancy, hand- and fingerprints lie in the first place, not only because of the frequency of their detection at the crime scene, but because of the fact, that with their help it is possible to find the trace and disclosure the offender in the shortest way.

Therefore, this article is aimed specifically at the study of handprints formation mechanism, elements and forms of interaction, classification of traces in accordance with scientific researches of various scientists.

*Y. V. Moroz, postgraduate of the
department of Luhansk Scientific Research
Forensic center of the MIA of Ukraine*

FEATURES OF CONDUCTING THE IDENTIFICATION STUDIES OF SEPARATION MARKS, FORMED AS A RESULT OF MECHANICAL ACTION

The identification tasks solving, which are reduced to the establishment of the identity of a particular object, is important in the forensic identification. By conducting trace examinations, the issues, which relate to the establishment of

individual circumstances of the crime commission, some features that characterize the identity of the offender, as well as the identification of objects by the traces, are solving. The objects of forensic identification are separation marks, formed as a result of mechanical action, which are the most numerous objects of trace research. Since these separation marks really reflect the mechanism of crime committing, their role in the solving, investigation and prevention of crime is important.

This article is aimed at studying the peculiarities of conducting identification researches of separation marks, formed as a result of mechanical action, as well as the mechanism for the formation of these traces.

In the process of conducting identification researches, separation marks, formed as a result of the mechanical action, the signs of the identified object are compared with their reflections on the identification tool. The only ground for the conclusion about the objects identity is an individual (unique) set of their identification features. The evaluation of the whole set of identification features inherent in one or another identification object is decisive at this stage of conducting expert research. The question of what minimum complex of features in each case is sufficient to substantiate the categorical conclusion depends not only on the quality of the objects provided for examination, the completeness and diligence of the conducted research, but also on other factors: professional training, qualifications and expert experience, his attention, concentration, and other subjective factors, as well as on what criteria he is guided in when assessing the signs.

The purpose of writing this article was to study and substantiate the peculiarities of conducting the identification research of separation marks, formed as a result of mechanical action, as well as minimizing the influence of subjective factors in conducting the research data, to develop objective evaluation criteria, to increase the scientific level and reliability of trace researches, to exclude the cases of expert mistakes.

*O. V. Nenia, PhD in law, lead researcher of
the State Research Institute of the MIA of Ukraine*

CURRENT PROBLEMS OF CYBERCRIMES FORENSIC RESEARCHES

The processes of globalization and as a result, the wide penetration of new information technologies in everyday life and in all spheres of human life, in the

presence of their undoubted advantages, cause a number of forensic issues, in particular, as part of the cybercrime objects study that need non-traditional measures and methods of their solving.

The problem of using science and technology achievements for criminal purposes is connected with one of the most important integration processes - the creation of an international in essence and global in form, the Internet network which unites millions of computers.

At the Xth Congress of the United Nations, held on April 10-17, 2000, the following definition of "cybercrime" was given: a set of crimes committed in cyberspace through computer systems or computer networks, as well as other means of access to cyberspace, in within computer systems or networks, and against computer systems, computer networks and computer data.

The cybercrime is any crime that can be committed by means of a computer system or network, in a computer system or network or against a computer system or network. Basically, the cybercrimes encompass any crimes capable of being committed in an electronic environment.

Currently, the most common types of cybercrime are: carting, vishing (phishing), online fraud, social engineering, illegal (destructive) content (hybrid technology), malware, refilling, piracy, card sharing, cyber-spying (computer espionage or "cyber intelligence").

When investigating the cybercrimes, the forensic researches (in particular forensic examinations) are necessary to establish the causal link between a committed act and negative consequences. The concepts of the subject and object of forensic examination are among the key in the theory and practice of forensic expertology. At the same time, scientists and experts have different understanding of the materiality signs of research objects. This becomes a key point in the field of cybercrimes, when the global information space, the informational mega environment are immaterial, and in its essence, can not be reduced to the physical medium in which they are embodied. Consequently, the objects of forensic (expert) investigation of such crimes may be "intangible goods", for example: the virtual or additional (augmented) reality created using computer technologies; virtual communities (in particular, "Blue Cat"); crypto currency, etc.

These intangible objects can be compared in the form with such a generalized object as the mental activity of a person in forensic psychiatric, forensic psychological and complex psycho-psychiatric, which can be represented as a set of certain properties that characterize mental processes, mental qualities, psychic states and properties. In this case, the mental activity of a person in each of these types of examination is considered in combination with material sources of information -

documents, characteristics, personal records, diaries, drawings, etc. Similarly, the cybercrimes contain graphical, sound and other information.

Therefore, the study of events, facts, phenomena and other immaterial objects is conducted by studying the physical storage media about them. If we talk about cybercrimes, then the physical storage media may be: text, graphics, sound, video, etc., which are contained on certain tangible media - hard disks, servers, etc.

The effectiveness and comprehensiveness of the cybercrime forensic knowledge process is largely due to methodological preparedness.

Consequently, within the framework of a single strategy for combating cybercrime, it is important to develop a modern comprehensive forensic technology of these crimes objects investigation. At the same time, such technologies can develop in such directions: the search for a method of intangible objects materialization of research or the change of approaches to the study of immaterial objects, with a very carefully chosen selection of criteria for assessing their characteristics and properties. An interesting example of changing approaches to the study of immaterial objects may be a well-known method of expert evaluations as a subjective evaluation of non-linear distortions of a sound signal based on subjective perception.

*M. V. Nechesniuk, researcher of the
scientific-research laboratory on the issue
of forensic ensuring of Educational and
Research Institute № 2 of National Academy
of Internal Affairs*

A SPECIALIST PARTICIPATION IN THE INVESTIGATION RELATED TO INTENTIONAL DESTRUCTION OR DAMAGE TO PROPERTY BY EXPLOSION

The main direct object of the crime, provided by art. 194 of The Criminal Code, is the property right. An additional optional object may be public order, environmental safety, human life and health.

The analyzed act subject may be any real and personal property, except for its separate types, the destruction or damage of which forms a special kind of destruction or damage to property.

In many cases, the destruction (structural damage), damage (spoilage) of certain types of property provides for administrative liability.

The subject of destruction or damage in an offense under art. 194 of The Criminal Code may be only property of another. To qualify acts under art. 194 of the Criminal Code, it does not matter to whom exactly and the right of which the form of ownership (state, collective, private, etc.) belongs property that is the subject of destruction or damage.

The objective aspect of the analyzed crime is characterized by socially dangerous acts consisting in the destruction or damage to property, the consequences in the form of damage in large amounts and the causal link between the indicated actions and consequences.

Instability in society is increasingly generating not only criminal offenses development, but also the dissatisfaction of individual strata of the population as a political and material component of life. The number of crimes related to intimidation of certain political figures, competitors, and entrepreneurs by the destruction or damage to property is increasing. In recent years, given the relative simplicity of purchasing explosive devices due to military actions in the eastern part of the country, the number of crimes related to their use has increased.

The disclosure and investigation of the crimes committed by the explosion requires the wider use of the special knowledge that is used to obtain evidence with the help of specialists.

The crimes investigation specifics committed with the use of explosives and explosive devices is characterized by some difficulties. As a rule, explosions are unexpected for others and complicated by their mechanism. Due to the speed of time, explosions complicate the perception of events by witnesses and victims.

Criminals are increasingly choosing to use an explosive device as an instrument of crime. This is because of the fact that the explosion, having a powerful destructive force, is able to strike a victim over a considerable distance, can be programmed for a certain time, or initiated by any victim action, or radio signal.

There is no doubt that the success of the disclosure and investigation of crimes depends largely on how promptly, clearly and consistently, taking into account the prevailing investigative situations, the necessary investigative (search), operational search and other actions are organized and conducted immediately after the detection of a criminal incident.

Among the ways of gathering evidence by the parties to the criminal proceedings listed in art. 93 of The Criminal Procedure Code, there are those that involve the participation of a specialist and require the use of specialist knowledge in the conduction of certain investigative (search) actions, including during the crime scene examination on the facts of damage or destruction of property, demand and

receipt of expert opinions, etc. Involvement of specialists (in the context of the search and recording of the information sources about a criminal event) is not only an expedient form of special knowledge and technical means application during the conducting of investigative (search) actions, but also a guarantee of qualitative and effective performance by investigators of all spectrum of their professional duties in specific conditions.

An overview of the crime scene as an urgent investigative (search) action plays a huge role in these crimes disclosure and investigation. A timely, complete and tactically correct review of the crime scene in the future will allow to build correct versions, direct the disclosure of the crime in the right way, identify the offender and prevent him from committing a new crime, as well as obtain important information regarding many circumstances to be proved in the criminal proceedings: time, place, method, motives and purposes of committing a crime, factors contributing to its commitment, type and size of harm, etc. During the review, a significant part of the most important traces of the crime and the offender, other material evidence are revealed and investigated. The results of the investigation, especially its type, as an overview of the crime scene, allow the investigator to determine the direction of the investigation, to imagine the mechanism of the crime, the offender.

It is especially important that the specialist, who provides assistance to the investigator in the review of the crime scene, had not only special knowledge in a particular field, but also sufficient skills for their application in practice.

However, despite the significant development of the tactics of the investigator's review in forensic science and practice, the value and possibility of the review are often underestimated. As a result, it is conducted superficially, quickly or simply formally, and the crimes as a result remain undisclosed. It is influenced by a number of objective reasons. This is the selection of human resources, improvement of legislative regulations, and interaction of all services directly during the crime scene examination, etc.

Further elaboration and implementation of questions on the application of special knowledge at different stages of crimes investigation, related to intentional destruction or damage to property of another, not only through an explosion, will increase the effectiveness of their investigation, develop specific methodological recommendations for the improvement of legislative criminal procedural norms and practices of their application.

*I. V. Pyrih, doctor of law, docent,
professor of criminalistics, forensic medicine
and psychiatry department of Dnipropetrovsk
State University of Internal Affairs*

THE CONCEPT OF THE FORENSIC AND EXPERT PROVIDING OF PRE-TRIAL INVESTIGATION

One of tasks of criminal proceeding there is providing of rapid, complete and unprejudiced investigation. The fulfilment of this task is impossible without implementation to the combating crime practice modern scientific and technical facilities, new methods of detection and exception of the objects related to the crime, modern methodologies of expert researches. For efficiency of any type of human activity, including activity to investigate criminal offences, corresponding its providing is needed.

In forensics a term «providing» appeared in 1980-th and was used in relation to connection «technician-criminalistics». Also it was about the «methodical-criminalistics providing», «scientifically-methodical providing», «scientific providing». Under the scientifically-methodical providing it understands making conditions for the input of science and technical achievements in practice of combating crime (approbation, clarification of terms and order of application, development of methodical recommendations or instructions, users preparation and others like that). The problems of the information and reference providing of crimes investigation are researched in many scientific studies. The most widespread is a concept of the criminalistics providing under that it is understood a set of information, scientific and scientifically-methodical components that play a substantial role in the increasing the effectiveness of investigative activity.

Separate scientists give definition to the criminalistics providing in relation to separate types crimes investigation: tax, illegal intellectual property infringement, illegal interference rights with work of the electronic computing machines (computers), in the field of intellectual and allied property rights violation, self-serving and violent organized criminal activity and others like that.

Most scientists bind the concept of the criminalistics providing with criminalistics theory introduction into the process of investigation. Examining criminalistics as science, that consists of general theory, criminalistics technique, criminalistics tactics and criminalistics methodology, the contents of each components in the theory of the criminalistics providing is examined: technician-criminalistics, tactics-criminalistics and methodical.

On the basis of analysis of scientists views on this problem, we will mark the basic types of providing of the criminal offences investigation: depending on the stages of the criminal process of providing: pre-trial investigation, judicial trial, proceedings in the court appeal and cassational instances, implementation of court decisions, proceedings in the Supreme Court of Ukraine, proceedings for newly discovered circumstances; depending on the areas of knowledge: criminally-remedial, criminal law, forensic, criminal intelligence, psychological providing; in relation to the separate types of crimes: providing of investigation of violent, self-serving and violent, crimes against property, in the field of business activity and etc.; in relation to separate procedural actions: providing of the investigative activities conducting, criminal intelligence measures, expert researches, secret of pre-trial investigation, criminal proceedings participants safety, rights and freedoms of a person, crime prevention and etc.; on the contents: scientifically-methodical, law, material and technical, informative, organizational, personnel etc.; by the type of subjects activity that participate in investigation: procedural, intelligence, expert.

Expert activity and its providing at the scientific theory level was investigated not enough. Many scientists paid attention to the separate problems of forensic examination or decided concrete expert tasks. Providing of expert activity, both investigative and intelligence is scientifically-methodical, law, material and technical, informative, organizational, personnel.

The concept «expert providing» is considerably wider than «expert activity», and includes the types of activity mentioned above. The expert providing needs to be examined directly as the activity sent to the decision of the criminal proceedings tasks, and as a separate scientific theory, that includes the certain system of knowledge in relation to the effective use of facilities and methods of such activity. Under the expert providing of pre-trial investigation it is needed to understand separate study that is the system of scientific positions and recommendations in relation to the optimal complex of actions under a supply to the subjects of forensic expert activity of necessary scientifically-methodical, law, material and technical, informative, organizational, personnel and other resources for the decision of the tasks entrusted on them.

*M. V. Semenikhin, director of Lugansk
Scientific Research Forensic Center of the MIA
of Ukraine*

*S. H. Kachurin, PhD in law, associate
professor of law department of Volodymyr Dahl
East Ukrainian National University*

COUNTERACTION IN THE CONDUCTING OF HANDWRITING EXAMINATION: CONCEPT, FORMS AND APPROACHES

Successful solving of the identification issues handed down to the decision of the handwriting expert due to the quantity and quality of handwriting and signatures samples, the professional proficiency of the investigator who receives and selects them when conducting the relevant investigative action (chapters 15, 16 of the Criminal Procedure Code, art. 234, 237, 245 of the Criminal Procedure Code), – and the presence (absence) of counteraction to the selecting of samples by the persons being inspected. The last circumstance has a significant effect on the comparison of analyzed samples with the studied handwriting material. Therefore, the relevance of the article is due to the need to consider the circumstances that impede the achievement of the objectives set at the appointment and conducting of forensic handwriting examinations and reduce the efficiency of the data obtained by the expert, the need to develop forensic recommendations to overcome and prevent the counteraction of persons who are being tested.

The aim of the study is to analyze theoretical issues and develop practical recommendations for the recognition, overcoming and preventing counteraction in the forensic handwriting examinations conducting. In this regard, it was considered the forms and methods of counteraction of interested persons to conduct a handwriting examination, as well as methods of predicting by the investigators of this counteraction and overcoming it.

According to the authors, the practical implementation of the above mentioned provisions during the pre-trial investigation should positively influence the qualitative state of the investigators activity in identifying counteraction methods of persons being inspected, when conducting forensic handwriting examination and selecting of experimental patterns of handwriting and signatures, and improve the tactical and forensic provision level of the pre-trial investigation.

On the basic of the study results and above mentioned statements, the authors assert that:

1. Development of the handwriting examination, as practical activity, requires solving of theoretical, methodical, organizationally administrative, tactical and procedural tasks.

2. Conducting of the handwriting examination is an investigative action, as it is sent to forming of evidential base and consists of three stages: a) preparation and commission a forensic examination; б) proceedings of expert research; в) research, estimation and verification of the expert conclusion.

3. The preparation stage of the handwriting examination includes the system of judicial, organizational, technical actions and tactical maneuvers in a handwriting material collecting, including – comparative samples. Important tactical position of the materials preparation is a permanent cooperation of the investigator with a handwriting specialist.

4. The counteraction to conducting the forensic handwriting examination – it is a conducted before discovering the crime and after beginning of its investigation deliberate activity or inactivity of interested persons for creating obstacles in collecting objects, which is sent for examination, in order to prevent the truth from being established in a criminal case.

The counteraction methods of the person being inspected, are: a) the commission of forensic examination is: 1) the hiding of free samples of handwriting and signatures, that is, different manuscripts; 2) evasion from appearance to the investigative body in order to refuse the provision of experimental samples of handwriting material; 3) full or partial forging of documents); b) when selecting from her\him the experimental patterns of handwriting and signatures: 1) the person refusal to provide the patterns of handwriting and signatures; 2) deliberate distortion by the person his handwriting and signature; 3) the informing of false information about the person's lack of knowledge of a particular person signature transcription.

5. The choice of tactical maneuvers of the experimental examples sampling for comparative research is based on the predicting results of the prevailing investigative situation, the behavior of the person being inspected. The prediction is conducted in two ways: the direct perception of the personality characteristics of the person being inspected during the preliminary investigative actions; indirectly – by collecting and analyzing the information that characterizes it.

F. M. Sokyran, PhD in Law,
Associate Professor, Professor of the Forensics
Faculty at the National Academy of Internal Affairs

PSYCHOLOGICAL IMPACT DURING PRE-TRIAL INVESTIGATION

Investigative tactics as a branch of forensic science studies the main directions and methods of effective detection, processing and use of evidentiary information with the aim for the best possible investigation of offences and specific investigative situations.

The possibility of choosing and changing decisions, alternatives in investigator's actions and predicted actions of other participants of investigation, conditions and methods of actualization of mental processes of all participants are significant elements for investigative tactics.

An investigator, psychologically influencing people involved in the proceeding, receives probative information. Such impact is one of the important tactical means of investigation and its development is essential for the forensic science. That would allow performing the tasks of criminal justice more effectively within the legal framework. In the process of revealing and processing information, the investigator also experiences a negative influence of objective and subjective factors that threaten the effectiveness of the use of received information.

Such factors may be classified into the following groups: objective and subjective, prepared and random, deliberate and involuntary, falsehood and deceit, etc.

An important task of the investigative tactics (both scientific and practical) is the use/disposal of the impact on these factors, within the limits of the criminal procedural law and the rules of judicial ethics, taking into account the practice of applying them during the investigation.

One of the ways to solve this problem is to develop and use psychological effects.

It should be noted that the main direction of psychological impact both pre-trial and procedural is to obtain objectively truthful information, which is acquired lawfully, with the sources established by law, in relation to the investigated event.

Since communication and intercourse are impossible without psychological impact, it should be considered indisputable that the forensic (investigative) tactics in the theoretical and practical recommendations should take into account the existence of such influence, use it and work on the development of effective techniques and tactical and psychological systems.

One can state that the psychological influence as an independent method of carrying out an investigation in various forms of detection and as an integral part of tactical admission is a source of tactical recommendations and an indispensable structural component of tactical receptions and operations of procedural and auxiliary (operational) character.

This allows us to conclude that the psychological impact that an investigator applies during the investigation and transformed into tactical receptions is a mandatory essential element of forensic (investigatory) tactics.

R. V. Topolia, *senior forensic expert at
Cherkasy Scientific Research Forensic Centre
of the Ministry of Internal Affairs of Ukraine*

FOREIGN EXPERIENCE IN LEGAL AND ADMINISTRATIVE REGULATIONS OF FORENSIC RESEARCH

The issue of borrowing positive provisions from legislations of other countries regarding the legal and administrative regulation of vehicles forensic expertise was always relevant. This issue is being acutely faced by Ukrainian modern society, due to the fact that currently, methods of forgery of number plates, vehicle identification numbers and registration certificates are constantly and rapidly developing.

The purpose of the article is to study progressive traits of analysed activity in foreign countries, possibilities of their implementation in Ukrainian legal framework and also to formulate and suggest development options for this sphere in Ukraine basing on the experience of EU countries (Spain, Poland, Germany, Lithuania, etc.).

According to the analysis of EU countries' legislation was noted the following: principles of ensuring expert independence are gradually implemented in the world; focus lies not within departmental affiliation of an expert, but within his special knowledge, that are necessary for solving the problems of justice; the principle of competitiveness is ensured among the experts, as well as the other principles, that are decisive for providing justice system with truly independent, objective and qualified expertise. At the same time, the presence of the private forensic institutions in EU countries ensures not only legal rights and freedoms of the society, but also allows to reduce budget expenses for the maintenance of state forensic institutions substantially.

In EU countries legal and administrative regulation of vehicles forensic expertise is usually performed in a way, that departmental forensic institutions

conduct their activity in cooperation with police institutions under the jurisdiction of the Ministry of Internal Affairs.

To summarize, the foreign experience of legal and administrative regulation of vehicles forensic expertise is researched in the article. The author studies experience of such countries as Netherlands, Great Britain, Czech Republic, Finland, Sweden, Belgium, France, Spain and others. Provisions of law in such countries as Germany, Norway and Lithuania, where there are two registration certificates (a "big" one and a "small" one) in the territory of the country, are extremely progressive. The "small" registration certificate, entitles only to drive or use a vehicle, and the "big" one has wider powers and entitles to dispose and alienate a vehicle.

*R. S. Kharuk, forensic expert of
Volyn Scientific Research Forensic Center
of the MIA of Ukraine*

SEPARATE ISSUES OF THE TRACE RESEARCH OF BLOOD TRACES

Blood traces play an important role in the investigation of different crimes, because they have an important information about the circumstances that have occurred during the crime. Before the pre-trial investigation bodies, during the investigation of a number of crimes it is often conducted blood research, which requires the involvement of specialists in forensic medicine, chemical, biological, trace and other types of examination.

Questions that the experts solve during the blood trace examination, depends on the circumstances of the case. That's why, in each criminal case between the investigator, who commissions the forensic examination, and the expert, it is necessary to establish business contact and mutual understanding, identify the expert possibilities in each particular case, taking into account the available evidence, and agree on the exact wording of the questions that the expert should solve.

The trace research of blood traces which are detected at the crime scene or on the clothes allows to define the mechanism of their formation, and, taking into account other data, to reconstruct the crime.

D. K. Cherednichenko, *Head of the Main Forensic Centre of the State Border Guard Service of Ukraine*

O. V. Ananin, *PhD in Technical Science, Senior Researcher, Senior Officer of the Department of Methodological Assurance and Planning of the Main Forensic Centre of the State Border Guard Service of Ukraine*

COUNTERACTION TO ORGANIZED CRIME ON THE NATIONAL BOUNDARY IS ONE OF THE MAIN DIRECTIONS OF STATE POLICY ON THE ISSUES OF NATIONAL SAFETY AND EURO INTEGRATION OF UKRAINE

The requirement of modern world to the struggle with organized crime is settlement of effective providing of forensic activity of the State Border Guard Service of Ukraine. For this purpose, information on the existing and new ways of forgery fosters qualitative performance of document forensic technical examination. Discovering of new types of forgery requires constant analysis of specific features of fakes, which will further encourage the improvement of elements of protection in passports and other documents.

The aim of the article is to describe the results of the studying of the protection elements of the modern identification documents, used in different EU countries, and specific ways of its forgery found by the State Border Guard Service of Ukraine during 2017.

In 2017 the samples of new identification documents which are already used in Austria, Belgium, Vatican, Germany, Finland, Turkey, Switzerland, were delivered to the Main Forensic Centre of the State Border Guard Service of Ukraine. These new elements of protection are developed to prevent falsification.

It is also impossible to create them without special equipment. The pages with data content may have about ten elements of protection. The most protected passport pages are inside front covers.

Nowadays the most widespread ways of forgery are mechanical text changes, chemical milling of the text, corrections in handwritten and/or typed text, substitution of documents' pages, photos' substitution.

In some EU countries were discovered facts of USA, Canada, Turkey passports' total forgery of all protection elements, despite the fact of their multi-level protection.

The results of forensic activities of the State Border Guard Service of Ukraine have led to the conclusions that currently EU countries continue active search of efficient anti-forgery mechanism for identification documents. For this purpose, new technologies based on balanced set of typing means, materials, combination of different types of protection are used.

Aiming to improve the quality of execution of forensic examination of identification documents, which entitles the foreigners to cross the state border of Ukraine, it is important to find optimal range of protection elements and to give the criminal offences, related to the usage of fake documents, the characteristic.

*V. M. Chysnikov, doctor of law, docent,
chief researcher of the State Research Institute
of the MIA of Ukraine*

**H. M. RUDYY – FAMOUS UKRAINIAN FORENSIC PRACTITIONER
OF THE BEGINNING OF THE 20TH CENTURY (TO THE 155TH
ANNIVERSARY FROM THE BIRTHDAY AND THE 100TH ANNIVERSARY
OF THE DAY OF DEATH)**

This year two jubilee dates are celebrated: 155 years since the birth date and 100 years since the tragic death of the prominent Ukrainian forensic practitioner of

the beginning of 20th century, titular councilor Heorhii Mykhailovych Rudyy (1863-1918) – a talented detective, one of the pioneers of the scientific and technical means application in the struggle against crime in the Russian Empire, the "father" of domestic fingerprinting and service dog breeding, the detective's suitcase ("investigator's kit"), the founder of the police forensic service on the territory of Ukraine, as well as the author of the first in Russia instructions to the detective police officers.

Heorhii Mykhailovych was born in 1863 in a peasant family in Podillya, Tereshky village of Mogylyv district of Kyiv province (now Bar district of Vinnytsia region).

In August 1901, H. M. Rudyy was invited to head the detective part of the Kyiv City Police. Since that time in his police career a new stage has begun, which wrote his name in the annals of Ukrainian and Russian forensics. He began his activity in his new position with an acquaintance of Moscow and St. Petersburg detective departments organization, after that he prepared and sent a memorandum about regulating detective activity in Kyiv to the Kyiv police chief.

To his mind, in the detective department it should focused on the criminals of all categories who commit crimes in different cities. For this, he proposed to oblige Kyiv and neighboring provinces police agencies to provide periodically to Kyiv detective department the information about all significant crimes committed in their regions, search and supervision cards for wanted persons, as well as cards for thieves-runners.

The head of the detective department worried about the issue of future detectives preparing. For training of the experienced officials, Heorhii Mykhailovych recommended to introduce the compulsory practical training for students of Kyiv School of Senior Officials in the detective department.

Concluding his memorandum, H. M. Rudyy stated that for the implementation of the detective part reorganization, first of all, the creation of an anthropometric office, it is necessary to have at least two experienced persons, as well as additional allocation. In order to substantiate the allocation of the required amount of funds, H. M. Rudyy added to the memorandum the Estimate of the additional costs, necessary for the detective department of Kyiv City Police when introducing a search and surveillance system.

The Kyiv police chief, the governor and the governor-general approved H. M. Rudyy proposals concerning the reorganization of the detective part. Ministry of Internal Affairs also supported the Kyiv initiative. As a result, it has become possible to expand significantly the space of the detective department, increase its personnel, and create a police control room for the regular duty of police officers and agents to accept statements and reports of adventures and conducting a search shortly after the

incident. Anthropometric office and other structural departments were created – offices: investigative, adventure, personal detention, certificates and supervision.

A clerical correspondence of the detective department obtained significant changes.

In addition, supervisory cases conducting were implemented: about the search for various persons; about the search for stolen money, things, animals; about taking away in suspects the money and things at suspicion of their unlawful acquisition; about criminals living in Kyiv; about adventures in Kyiv; about supervision of different persons; about persons serving in the detective department; about different subjects; about naughty children and pranksters; about Jews who live illegally in Kyiv; about persons brought to criminal liability for crimes and misdemeanors; about receipt of various kinds of information; about horse stealing, as well as supervision of the documents, taken into account, and administration.

The introduction of a new system of supervision and search led to the need to focus on the detective department for inquiries about the crimes previously committed by police officers in the police stations. This focus was aimed at combining the efforts of the police agencies about detecting crimes committed by criminal groups and successfully their investigating. As further events have shown, the measures have given positive results.

The most important subdivision of the detective department internal organization was considered an anthropological office. The functions of registering criminals, systematizing all information about them, establishing their identity; issuance of conviction certificates and the search for hiding persons were appointed on this office.

Creation in April, 1902 the anthropometric office at the detective department of Kyiv city police initiated the development of forensic subdivisions in the Ukrainian police agencies. Therefore, H. M. Rudyy should be considered the founder of the police forensic service on the territory of Ukraine.

For successful crimes disclosure Heorhii Mykhailovych had been receiving gratitudes not only from the governors, but also from grateful city inhabitants.

Continuation of the article will be in issue number 2 (30).

*V. P. Yankovskyi, postgraduate of the
department of Dnipropetrovsk Scientific*

CERTAIN ASPECTS OF THE 4 MM FLOBERT CALIBER REVOLVERS RESEARCH EQUIPPED WITH THE WAY OF SEPARATE LOADING

Recently, 4 mm Flobert caliber revolvers have been widely distributed on the territory of Ukraine, which, according to the manufacturer's information, are designed for conducting the firing practice outside of special premises and platforms (shooting galleries, firing ranges). These revolvers do not have the purpose to a human injury, and their slugs of regular cartridges do not have enough specific kinetic energy to infliction of person serious bodily injuries. Therefore, revolvers of this type do not belong to the category of firearms. In addition, the purchase of them does not require the issuance of any permissions.

However, it should be noted that the 4 mm Flobert caliber revolvers have the characteristics inherent to the firearms of this type (the design of the chamber and the bore, the coaxiality of the outlets of the chamber with the bore, the bore without any protective elements, etc.), and under certain charging conditions may pose a threat to human life and health.

In this article, the author considers the factors that stipulate the widespread distribution of 4 mm Flobert caliber revolvers in Ukraine, shows on the examples the possibility of their equipment by way of separate loading, indicates the peculiarities that arise when they are investigated, and that in this method of loading they can pose a threat to human life and health. In this case, the author relies on the materials of expert practice and his own experience in the field of firearms and ammunition study.

The information provided in the article has practical meaning and can be used in the course of forensic weapons examination when coming to research the 4 mm Flobert caliber revolvers loaded with a separate charge.