

Problematic Issues on the Use of Forensic Analysis During Investigation of Crimes

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The purpose of the work is to consider the possibilities of applying the method of forensic analysis in the detection and investigation of crimes, to identify problematic issues and ways of optimizing the specified activity of law enforcement agencies. Particular attention is paid to the directions and possibilities of using forensic analysis for the detection and investigation of crimes. Positive examples of the use of forensic analysis in investigative practice for the purpose of uncovering and investigating crimes are presented, as well as the shortcomings of this method are outlined. The effectiveness of the considered method and its availability are noted. The necessity of using forensic analysis in combination with other analytical methods is substantiated. Problematic issues of the application of the method of forensic analysis are identified, ways of solving them are proposed. The need for proper methodical support for the use of forensic analysis in the investigation of crimes was noted. Attention is focused on the fact that the use of forensic analysis requires awareness of its possibilities, in particular, a certain level of knowledge and skills in applying this method during an investigation, gaining experience in using its results in practice, as well as relevant literature and methodological recommendations and access to them by all employees of law enforcement agencies engaged in the detection and investigation of crimes. The need for a comprehensive solution to the problem of methodological support for the use of forensic analysis

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by all interested state bodies with the involvement of the necessary scientific potential for conducting relevant research and preparing practical recommendations in order to ensure the proper conditions for effective detection and investigation of crimes is emphasized.

Keywords: criminalistics; forensic analysis; investigation of crimes; methodological support; serial murders; sexual maniacs; investigative leads.

*Analysis — splitting a system into parts — gives us knowledge,
and synthesis — combining elements into a whole — gives us
understanding.*

Joseph O'Connor

Research Problem Formulation

The issue of the application of forensic analysis during the detection and investigation of crimes is relevant to this day, and the science of forensics is under a certain lack of interest of domestic and foreign scientists and practitioners in its solution. There are practically no dissertations, monographs, other scientific studies, as well as relevant sections on this issue in guides for investigators and inquirers, textbooks, training manuals, methodological recommendations.

In recent years, there has also been no approach to the solution of the mentioned problem, no notable works on this topic have been published, and individual publications that appear from time to time in periodicals and materials of scientific conferences both in Ukraine and abroad, mostly have a theoretical, general nature and relate only to certain aspects of the use

of the mentioned method, without solving the problem in general.

Analysis of Recent Researches and Publications

Among scientific researches on the above-mentioned issues, the authors of which at one time investigated in considerable detail the main issues of the application of forensic analysis in criminal justice (in particular, during the investigation of crimes), scientific articles, educational and practical manuals by V. Zhuravel, V. O. Konovalova, V. Kurapka, E. Lokar, H. Malievski, P. Saukko, E. B. Simakova-Yefremian, B. Kholyst, D. Tsekhan, V. Shevchuk, V. Yu. Shepitko, M. V. Shepitko, V. Yusupov, and others¹, which could form a solid basis for further scientific investigations. In addition to those mentioned, some aspects of forensic analysis (although not to such an extent,

1 Коновалова В. Е. Убийство: искусство расследования : монография. 2-е изд., доп. и перераб. Харьков, 2016. 320 с. ; Шепітько В. Теоретико-методологічна модель криміналістики та її нові напрями. *Теорія та практика судової експертизи і криміналістики*. 2021. Вип. 3 (25). С. 9—20. DOI: 10.32353/khrife.3.2021.02 (date accessed: 17.03.2022) ; Шепітько М. В. Концептуальні засади розвитку криміналістики та судових наук. *Архів кримінології та судових наук*. 2020. № 1. С. 89 ; Шепітько В. Ю., Коновалова В. О., Журавель В. А. та ін. *Криміналістика : підручник ; за ред. проф. В. Ю. Шепітька*. У 2 т. Т. 1. Харків, 2019. С. 252—254.

but regarding to individual situations and specific areas of application) were analyzed by S. K. Shali ², P. Rani and A. R. Randzhan ³, R. Drishti ⁴, E. Viler ⁵, E.-A. Yanku ⁶, J. Peterson with co-authors ⁷, R. Gehl and D. Plecas ⁸ and many other scientists ⁹ (in particular, domestic ones ¹⁰). Also known in this direction are the fundamental

methodological works of both specialized institutions of foreign countries ¹¹, and the UN, published in the E4J series (“*Education for Justice*”) ¹².

Among the works of domestic scientists on the mentioned issues, it is worth paying attention to the monographs by V. V. Tyshchenko ¹³, P. Ya. Minka and

- 2 Shali S. K. Applicability of Forensic Science in Criminal Justice System in India With Special Emphasis on Crime Scene Investigation. *Medico-Legal Desire Media and Publications, Medico-Legal Reporter, Inaugural Issue*. 2018. 16 p. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3220169 (date accessed: 17.03.2022).
- 3 Rana P., Dr. Ranjan A. R. Use of Forensic Science in Investigation of Crimes; a Critical Legal Study. *International Journal of Engineering Science and Computing*. 2020. Vol. 10. Is. No. 7. Pp. 26618—2660. URL: <https://www.ijesc.org/upload/6d9eebad6d19ae821ac2812f4228c380.Use%20of%20Forensic%20Science%20in%20Investigation%20of%20Crimes%20a%20Critical%20Legal%20Study.pdf> (date accessed: 17.03.2022).
- 4 Drishti R. Analysis Of The Criminal Investigation System And Techniques. *Legal Service India E-Journal — Lawyers*. 2010. URL: <https://www.legalserviceindia.com/legal/article-7501-analysis-of-the-criminal-investigation-system-and-techniques.html> (date accessed: 17.03.2022).
- 5 Wheeler E. Applications of Forensic Evidence in Criminal Cases. *Themis: Research Journal of Justice Studies and Forensic Science*. 2016. Vol. 4. Art. 12. DOI: 10.31979/THEMIS.2016.0412 (date accessed: 17.03.2022).
- 6 Iancu E.-A. The Contribution of Forensic Science to Establishing the Truth in Criminal Proceedings. *Athens Journal of Law*. 2019. Vol. 5. Is. 4. Pp. 457—470. DOI: 10.30958/ajl.5-4-6 (date accessed: 17.03.2022).
- 7 Peterson J., Sommers I., Baskin D., Johnson D. The Role and Impact of Forensic Evidence in the Criminal Justice Process. School of Criminal Justice & Criminalistics, California State University, Los Angeles, 2010. 151 p. URL: <https://www.ojp.gov/pdffiles1/nij/grants/231977.pdf> (date accessed: 17.03.2022).
- 8 Gehl R., Plecas D. Introduction to Criminal Investigation: Processes, Practices and Thinking. Justice Institute of British Columbia. New Westminster, BC. 2016. 181 p. URL: <https://pressbooks.bccampus.ca/criminalinvestigation/> (date accessed: 17.03.2022).
- 9 Forensic Science Plays a Pivotal Role in the Legal System /Incognito Forensic Foundation. URL: <https://ifflab.org/the-importance-of-forensic-science-in-criminal-investigations-and-justice/> (date accessed: 17.03.2022).
- 10 Shevchuk V. Innovative principles of forensic support of law enforcement activity: issues of concept formation. *Theory and Practice of Forensic Science and Criminalistics*. 2021. 23rd Is. Pp. 7—23. DOI: 10.32353/khrife.1.2021.01 (date accessed: 17.03.2022).
- 11 Functions, Roles and Duties of Police in General. Ch. 1 / Bureau of Police Research & Development (BPR&D), India. Pp. 1—16. URL: <https://bprd.nic.in/WriteReadData/userfiles/file/6798203243-Volume%202.pdf> (date accessed: 17.03.2022).
- 12 University Module Series. Organized Crime / United Nations Office on Drugs and Crime. URL: <https://www.unodc.org/e4j/en/tertiary/organized-crime.html> (date accessed: 17.03.2022).
- 13 Тищенко В. В. Корыстно-насильственные преступления: криминалистический анализ. Одесса, 2002. 417 с. URL: <https://coollib.com/b/425251-valeriy-vladimirovich-tishchenko-koryistno-nasilstvennyie-prestupleniya-kriminalisticheskij-analiz/read> (date accessed: 17.03.2022).

K. O. Chaplynskyi ¹⁴, as well as separate articles by K. V. Kaliuha ¹⁵, K. V. Latysh ¹⁶ and some other researchers who indicates a much lower interest of Ukrainian criminologists in researching forensic analysis issues.

Article Purpose

Consists in considering possibilities of applying the method of forensic analysis to uncover and investigate crimes, identifying problematic issues and ways to optimize the activities of law enforcement agencies in this direction.

Main Content Presentation

Recently, scientific and technical progress is developing very rapidly: every year, if not every month, new technical means and technologies appear, thanks to which the possibilities to collect, accumulate, transfer, process and use information are enriched and expanded. However, not only honest people, but criminals actively use the latest achievements of scientific and technological progress in their activities: neglecting this fact can greatly complicate the work of law enforcement officers.

The analysis of investigative practice convincingly demonstrates that against the background of the growing importance of the information

component in the investigation process, the need to develop new approaches to the investigator's work with the data that comes to them, primarily in digital form, has also increased. In this regard, scientists and law enforcement officials rightly draw attention to the fact that *"it is possible to accumulate gigantic masses of information, literally bathe in a sea of facts, information and data and not be able to use them, to make timely, accurate and effective decisions based on them"* ¹⁷.

It should be noted that along with modern opportunities in the fight against crime, significantly enriched by the above-mentioned factors (rapid development of information technologies, digitization of the global space), the emergence of new means and methods for detecting, recording, and removing traces of crime, information about the criminal, physical evidence, stolen property, as well as their use for evidence in criminal proceedings, time-tested methods of investigators' work remain no less important and irreplaceable.

Among such methods is forensic analysis, which can be recognized with complete confidence as one of the tactical forensic tools and an important component of the tactical forensic support for the investigation of crimes ¹⁸.

- 14 Мінка П. Я., Чаплинський К. О. Тактика розслідування злочинів, вчинених організованими групами та злочинними організаціями : навч. посіб. Дніпропетровськ, 2007. 223 с. URL: <https://dduvs.in.ua/wp-content/uploads/files/Structure/library/student/p7rzozu.pdf> (date accessed: 17.03.2022).
- 15 Калюга К. В. Криміналістичний аналіз особи злочинця як елемент криміналістичної характеристики злочинів. *Право України*. 2016. № 12. С. 132—139. URL: https://pravoua.com.ua/ua/store/pravoua/pravo_ukr_12_16/Kaliuha_K_2016_12/ (date accessed: 17.03.2022).
- 16 Латиш К. В. Криміналістичний аналіз кіберінструментів вчинення злочинів. *Проблеми законності*. 2021. Вип. 153. С. 165—172. DOI: 10.21564/2414-990X.153.230429 (date accessed: 17.03.2022).
- 17 Ackermann V. R., Kurapka V. E., Malewski H., Shepitko V. Schaffung eines einheitlichen europaischen Kriminalistischen Raumes: Die Tätigkeit öffentlicher Organisationen zur Stärkung der internationalen Beziehungen. *Kriminalistik*. 2020. Is. 6. Pp. 355—363.
- 18 Черноус Ю. М. Криміналістичне забезпечення розслідування злочинів : монографія. Вінниця, 2017. С. 64.

Forensic analysis is always present in the activity of an investigator. From it, in fact, any investigation begins, since “*criminal case study /proceedings*” is impossible without an analysis of all available information, determination of the purpose, directions and tactics of further investigative (search) actions.

Regarding the importance and possibilities of the mentioned method of cognition, the following should be noted. When we speak about the analysis of materials of a criminal case or proceedings, it should be borne in mind that such an analysis can be carried out for different purposes:

- to resolve the issue of the sufficiency of the grounds for the initiation of a pre-trial investigation;
- to find out the investigative situation in criminal proceedings after an investigator accepts a case for their investigation from another investigator;
- to resolve the issue of choosing the further direction of the investigation (for example, whether the crimes were committed in one way, whether there are signs of a “*series*” of crimes; if so, what exactly do these signs indicate — what is the direction of the series of crimes, etc.: the so-called “*method forensic analysis of the operational situation*”);
- to resolve the issue of the sufficiency of the collected evidence and its reliability during the resolution of the issue of completing the investigation and drawing up the indictment.

Such an analysis can be carried out by a prosecutor during the implementation of the procedural management of the investigation, during the research of materials of the criminal proceedings

before the approval of the indictment, during the preparation for the trial. Also, forensic analysis is carried out by the defender/lawyer, getting familiar with the materials of the criminal proceedings/case during the investigation (investigative actions with the client, completion of the investigation), during preparation for defense in court, etc., as well as other participants in criminal proceedings.

However, let’s speak about the importance and possibilities of forensic analysis in the activity of the investigator, since it is a qualitatively conducted investigation that determines the possibility of a further judicial perspective of criminal proceedings.

Forensic analysis is one of the important work methods and tools of the investigator, effective and at the same time quite easy to use, accessible because it is always “*with the investigator*”, who must be ready to use it. Analytical abilities should be recognized as professionally necessary qualities of the investigator, without which their investigation will not be complete.

It is with the help of the forensic analysis of the criminal case materials / proceedings that shortcomings of the investigation are revealed: both individual or several investigative (search) actions, tactical operations, operative and investigative measures, and the organization of the investigation in general.

The investigation of a crime does not take place without a forensic analysis of all case files/criminal proceedings, the completeness and quality of investigative actions, their results, obtained evidence, available forensically significant information. During the investigation of unsolved crimes of the past years, forensic analysis is one of the main methods of work to identify and detain criminals.

There is no doubt that the concept of “*trifle*” does not and cannot have a place

in the activity of the investigator. Any insignificant, at first glance, detail (not a trifle!), regardless of whether it has a material (object, thing, their parts, etc.) or other origin (information or any data about a person, its psychological and characterological peculiarities, habits, etc.), in the investigation can become important, gain importance and become a starting point for putting forward, verifying or refuting the version, choosing the right direction of the investigation or decisive evidence in the criminal proceedings / case. That is why the investigator (as well as the operative) must learn to recognize possible clues (details), no matter how insignificant or improbable they may seem at first, carefully research them, be creative with possibilities of their use in order to establish all circumstances of the crime.

On the other hand, as practice shows, neglecting or incorrectly evaluating a certain fact / circumstance, which, at first glance, seems insignificant, unimportant, can lead to significant complications or other serious consequences. Retrospective analysis of high-profile crimes committed in past years can help today's researchers develop the right guidelines for forensic analysis when investigating crimes committed in the present. That is why we will consider cases from the investigative practice of past years.

For example, as a result of the analysis of materials of the criminal case of the so-called Odintsov maniac, the investigators correctly determined the likely place of residence of the criminal who committed a series of brutal murders of boys in the suburbs. According to the results of the analysis, everything indicated that the killer was a local resident. However, Golovkin (Soviet and Russian serial killer, pedophile, sadist, whose victims, according to court documents, were 11

boys between 1986 and 1992) was not included in the list of persons subject to verification, as he had registration in the capital, and the list of suspicious persons was made according to the passport office of the suburb. However, in fact, Golovkin lived without registration in the Odintsovo district, had a job, an apartment and a garage there, in the basement of which he tortured, raped, killed his victims and dismembered their corpses. Therefore, the neglect by the law enforcement officers of the fact that the circle of persons who should be checked should include not only persons registered by their place of residence in the Odintsovo district, but those who actually lived there, slowed down the investigation to a certain extent, and improper forensic analysis materials of the right contributed to the death of several more children at the hands of a serial killer until the killer was apprehended.

Let us give another negative example of the lack of a correct analytical approach to the investigation. In the early 1990s, two serial killers operated simultaneously in the same region: the aforementioned Golovkin and another criminal, Ryakhovsky. The first chose boys as victims, the second — adult men and women, especially the elderly. The methods of committing the murders and marks on the corpses of victims were strikingly different. However, the investigation at a certain stage of the investigation came to the erroneous conclusion that all these crimes were committed by one person.

Even the long history of the mistakes made by investigators in the investigation of the crimes of serial sex killers in the above and other examples, and today proves the need to take into account all the features of serial crimes, and also confirms the importance to the investigation of a properly conducted forensic analysis.

The mental activity of the investigator (investigative thinking) has its own specificity, determined by the scope and tasks of such activity. The art of investigation is largely about seeing and understanding small things. The complexity, inconsistency and considerable volume of the investigation's material make it impossible to research it without careful analysis. At the same time, the understanding of all the material obtained as a result of the analysis is achieved through synthesis. Development of investigative versions, investigation plans, evaluation of evidence – all these are synthetic formations. Here we are in complete solidarity with O. R. Ratnov, who notes that investigative thinking requires a harmonious combination of analysis and synthesis¹⁹.

Determining the directions and ways of solving the crime involves knowledge of the evidence collected in the criminal proceedings / case, available forensically significant information, as well as shortcomings in the investigation that prevented the quick solving of the crime and the identification of the criminal. In order to effectively identify and solve problems that arise during the detection and investigation of crimes, along with others, the method of forensic analysis is used, which must precede the synthesis of its results.

The field of application of the specified method in law enforcement activities is quite wide. With the help of the forensic analysis of the materials of the criminal case / proceedings (or the materials on the basis of which a decision is made to start a pre-trial investigation), the direction and planning of the investigation are chosen, shortcomings that were admitted during the investigation are identified: as

a separate or several investigative (search) actions, tactical operations, operative and search measures, and the organization of the investigation in general.

If investigative actions are properly conducted, the results of forensic analysis can become a starting point in solving crimes and identifying criminals. This method is effective and should be used at every stage of the investigation. The investigation of the crime is based on a detailed analysis of the materials of the criminal case / proceedings, which is based on many years of investigative practice. The application of forensic analysis becomes especially important during the investigation of unsolved crimes of the past years, where it is one of the main methods – it is actually the starting point of this activity.

Forensic analysis is also necessary during the investigation of serial and serial sexual (or sexual-sadistic) murders, which mostly belong to the category of crimes of past years, committed over a long period of time (months, years, decades), and which are quite often discovered by chance. According to investigative practice, during the investigation of mentioned crimes, the investigation chose the right direction thanks to the results of a detailed forensic analysis. Thus, the progress in the investigation of the case of the serial killer Mikhasevich (during the years 1971–1985 he committed 36 murders of women and one attempted murder in Vitebsk, Polotsk and the surrounding countryside, as a result of which he received the nickname “*Vitebsk Strangler*”) became possible primarily thanks to the analytical abilities of Mykola Ignatovich, the investigator of the prosecutor's office, who studied in detail the criminal cases about the

19 Op. cit.: Шепітько В. Ю. Кримінальна психологія: історія становлення та сучасний стан. *Юридична психологія*. 2021. Т. 28. № 1. С. 14–20. DOI: [10.33270/03212801.14](https://doi.org/10.33270/03212801.14) (date accessed: 17.03.2022).

murders of women in the region, properly analyzed the available information and came to the correct conclusion about the commission of crimes by one person. According to the results of the forensic analysis, M. Ignatovych succeeded in combining all criminal cases into one proceeding, after which the search for the criminal acquired an organized character and contributed to the identification and detention of the serial killer²⁰. Even before the practical use of the “*psychological portrait*” for the search for serial killers (it was first used by the psychiatrist O. Bukhanovskyi during the investigation of the crimes of the serial killer Chikatilo), by analyzing materials of the criminal case, the received operational data and reports from citizens, the investigator M. Ignatovych drew up an approximate portrait with his own hands a serial maniac (his appearance, occupation, presence of a car, involvement in law enforcement agencies), which later completely coincided with Mikhasevich’s characteristics. Later, by analyzing the case materials, operative and other data, M. Ignatovych warned of an investigative error, coming to the conclusion that the killer was trying to divert the attention of the law enforcement officers from Polotsk, where he lived and worked, by sending a letter from the “*patriots of Vitebsk*”, and focused the attention of operative-investigative groups on the city of Polotsk.

The practice of investigating serial sexual murders contains many other examples of the effective use of the method of forensic analysis. Work on the criminal case of the serial maniac Chikatilo (one of the most famous Soviet serial killers, from 1978 to 1990 committed 53 proven murders: 21 boys aged 7 to 16, 14 girls aged 9 to 17 and 17 older girls and women)

began with an analysis of the lifestyle of the criminal’s victims. The investigation found out important details: among all those killed (young women and children), only two girls were considered socially prosperous. According to the results of surveys of hundreds of witnesses, it was established that the victims most often caught the maniac’s eyes at suburban bus and train stations. This is how the tactics of the search were determined, and it was in this direction that investigators and operatives concentrated their efforts. Later, when the case came to a dead end, it was the analytical abilities and practical experience of the head of the investigative team, I. Kostoyev, that made it possible to suspect again and eventually arrest Chikatilo.

Forensic analysis of a series of intentional murders also contributed to the establishment of an important feature of another killer — Kuznetsov (a Soviet and Russian serial killer who killed 10 girls and women aged 15 to 30 in 1991-1992), who followed a certain stereotype in choosing his victims. It was this circumstance that was taken into account during the organization and implementation of operational search activities.

Unfortunately, there are quite shortcomings associated with improper use of the method under consideration. In the indictment in the case of Golovkin, the aforementioned Odintsov maniac, it is stated that at the initial stage, criminal cases were investigated separately, without taking into account the specific situation, evaluation of evidence and *analysis* of available data [*Highlighted by me. — Auth.*]. Investigative operatives substantiated their conclusions with assumptions or analogies of the existing practice of solving serious crimes, which made it difficult to find the criminal.

20 Кримінальна справа № 18/58404-86 з обвинувачення Г. М. Міхасевича.

The speed of solving the crime directly depends on the analysis of materials of the criminal case / proceedings and its results. This thesis is supported by the following example. During the investigation of the case of the “honored teacher” Slivko (a Soviet serial killer and pedophile who killed 7 boys and teenagers who were his students between 1964 and 1985), the investigation became interested in his identity only after the disappearance of the seventh teenager, the last victim of the killer (July 1985), although under conditions of proper assessment of the fact that all the victims visited the tourist club “CherGiD” (“Through the mountains and valleys”), which is popular with children, it would be logical to immediately start the investigation from there. During the investigation, a number of mistakes were made: if they started immediately with the club; if the investigator worked with children, but the not police officers who did not have experience and did not know the specifics of interviewing children; if Slivko was interrogated immediately after receiving information that the head of the club was filming strange tapes about strangulation; if they had immediately searched the premises of the club, they would have found hundreds of meters of film and many photographs that completely exposed the criminal, etc. Therefore, under the conditions of proper organization of the work based on the results of the forensic analysis, it would not have taken 22 years to solve the crime, but much less, and the lives of numerous victims of the maniac could have been saved: after all, after the arrest, Slivko confessed to committing

crimes, showed the places of murders and burials of the victims’ remains ²¹.

We see that the importance of forensic analysis in the process of investigating not only the types of crimes mentioned here, but also any other, is that, in addition to organizational and cognitive aspects (to establish the necessity and sequence of conducting investigative actions, operative and investigative measures, etc.), this method makes it possible to identify all the shortcomings / errors of the investigation, determine measures to eliminate them and prevent them in the future. To do this, the investigator must know about this method, understand its essence, meaning, place in establishing the circumstances of the event, and properly apply it in his daily activity of investigating crimes.

For the effective use of forensic analysis, in addition to practical experience, depending on the category of crime, direction and purpose of application, expected results, the investigator, operatives, experts, prosecutors-procedural managers need to have certain knowledge.

In particular, serial sexual murders are characterized by certain features that distinguish them from other murders, in particular those committed due to sexual motives. Therefore, their investigation should be carried out taking into account such features. This also applies to forensic analysis. It is rightly stated that “*the methodological basis of forensic analysis consists of knowledge of criminology, criminal law, theoretical foundations of criminology*”²².

We positively assess that the introduction of modern analytical

21 Александренко О. В., Женунтій В. І. Криміналістичне забезпечення розслідування серійних сексуальних вбивств. *Social function of science, teaching and learning* : Abstracts of XIII International Scientific and Practical conference. December 14–17, 2020. Bordeaux, France. Pp. 179–183. URL: <https://isg-konf.com/wp-content/uploads/XIII-Conference-14-17-BordeauxFrance-book.pdf> (date accessed: 17.03.2022).

22 Шепітько В. Ю., Коновалова В. О., Журавель В. А. та ін. Op. cit.

technologies (in particular, forensic analysis) into law enforcement activities is recognized as necessary. At the same time, it should be taken into account that, despite the interest of scientists and practitioners in the method of forensic analysis, such activity requires the presence of analytical specialists who should be trained, taught all the subtleties of this work, provided with appropriate technical and software tools, etc. Our opinion is aptly summed up by the conclusion made by the prominent criminologist V. P. Kolmakov: *“The shortcomings of the investigation are primarily due to the weak theoretical training of our investigative personnel and, in particular, weak and sometimes complete ignorance of criminology. This is also the reason for the fact that methodological manuals, which summarize investigative practice, remain without the necessary attention... Criminology requires that a practicing criminologist, an investigator, master all the variety of knowledge necessary for collecting and researching evidence... Equipped with a variety of knowledge, criminology, studying the ways of committing crimes and summarizing the experience of investigative work, should show the investigator the right way to solve crimes and expose criminals”*²³.

It is also necessary to take into account that the further development of the method of forensic analysis is aimed at the future: this work requires the efforts of more than one person and a certain amount of time — just as specialists must properly and correctly interpret the obtained results in order to successfully apply them in practice. Then the results of the practical application of the specified method should be evaluated, its possible weaknesses should be identified. It is also necessary to take into account possible problems with the training of analytical specialists, the

development of appropriate software and methodological support, the time required to create an effective system of forensic analysis, its effective implementation, testing in practice, evaluation of the obtained results and, if necessary, taking measures to improve this method.

That is why, despite the importance of using modern and effective analytical methods and techniques from the experience and practice of foreign law enforcement agencies in the fight against crime, methods tested by domestic investigative practice should also be used, which (if used correctly) can also contribute to the success of the investigation. One of these methods is forensic analysis. In addition, it is quite easy to use, does not require special abilities from the investigator, except for analytical skills.

Conclusions

The use of forensic analysis requires awareness of its possibilities, in particular, a certain level of knowledge and skills in the application of this method during an investigation, gaining experience in using its results in practice, as well as relevant literature and methodological recommendations and access to them by all law enforcement officers engaged in the detection and investigation of crimes.

Since there is a lack of such literature, interested state bodies and institutions (the MIA, the National Police, the State Bureau of Investigation, the Prosecutor General's Office of Ukraine, etc.) should take appropriate measures as soon as possible, involving the necessary scientific potential to conduct relevant research and prepare practical recommendations for the use of forensic analysis in order to ensure

23 Колмаков В. П. Больше внимания криминалистике : сб. науч. тр. : к 100-лет. со дня рожд. учен.-криминалист. ; сост.: В. В. Тищенко, О. П. Ващук. Одесса, 2013. С. 11, 15.

proper conditions for effective detection and investigation of crimes.

Проблемні питання використання криміналістичного аналізу під час розслідування злочинів

Олена Александренко

Мета роботи — розглянути можливості застосування методу криміналістичного аналізу в розкритті й розслідуванні злочинів, визначити проблемні питання та шляхи оптимізації зазначеної діяльності правоохоронних органів. Особливу увагу приділено напрямам і можливостям використання криміналістичного аналізу для розкриття та розслідування злочинів. Наведено позитивні приклади застосування у слідчій практиці криміналістичного аналізу з метою розкриття й розслідування злочинів, а також окреслено недоліки цього методу. Відзначено ефективність розгляданого методу та його доступність. Обґрунтовано необхідність використання криміналістичного аналізу в поєднанні з іншими аналітичними методами. Визначено проблемні питання застосування методу криміналістичного аналізу, запропоновано шляхи їх вирішення. Зауважено необхідність належного методичного забезпечення використання криміналістичного аналізу в розслідуванні злочинів. Акцентовано увагу на тому, що використання криміналістичного аналізу потребує поінформованості про його можливості — зокрема, певного рівня знань і навичок застосування цього методу під час розслідування, набуття досвіду послуговування його результатами на практиці, а також відповідних літератури й методичних рекомендацій і доступу до них усіх працівників правоохоронних органів, які займаються розкриттям та розслідуванням злочинів. Наголошено на необхідності комплексного розв'язання проблеми методичного забезпечення використання криміналістичного аналізу всіма зацікавленими державними органами із залучен-

ням необхідного наукового потенціалу для проведення відповідних досліджень і підготовки практичних рекомендацій з метою забезпечити належні умови для ефективного розкриття та розслідування злочинів.

Ключові слова: криміналістика; криміналістичний аналіз; розслідування злочинів; методичне забезпечення; серійні вбивства; сексуальні маніяки; слідчі версії.

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