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ODOROLOGICAL EXAMINATION IN THE CRIME INVESTIGATION PROCESS. THEORY, METHODS AND PRACTICE

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Abstract:

In this study, the author considers a specific method of forensic science, this is an odorological examination. Modern theoretical and practical problems related to the preparation and conduct of an odorological examination are considered. In addition, this article conducts a comparative study of odor samples, the possibility of which is based on the individuality of the smell of each person. The main task of the expert is to establish the presence of odor traces of specific people suspected of committing crimes. During the examination, smelling traces of human metabolism are examined. These traces can accumulate on various items: on clothes, shoes, hats, etc. Indeed, such objects can store the smell of the owner for a very long time, sometimes for several years. The smell can also be stored in dried blood. In this case, either the object itself with the stain is sent for examination, or a scraping is done, and if the blood is on a porous surface, then a wash is done. In addition to the above, the author came to the conclusion that odorous traces remain on different objects for different times: for example, on a cigarette butt or a knife handle - up to several hours, and if the offender has been in contact with the thing for more than half an hour, then the smell persists for up to three days.

Keywords: Odorology, chromatography, mass spectroscopy, olfactory, examination, smells, traces, forensics, evidence, laboratory.

Knowledge about the peculiarities of the smell of criminals have been known since ancient times however, odor traces have become the subject of scientific research relatively recently. This branch of scientific knowledge, which deals with the study of the nature and mechanism of the formation of odor traces, technical means and methods of their use in order to prevent and solve crimes, arose in the early sixties, thanks to the development of a group of Soviet forensic scientists, new means of preserving odor traces, and further the possibility of identifying a person (criminal) by the obtained smell traces, his identification, and capture.

The odorological method was invented in 1965 by the department of criminology of the Higher School of the KGB of the USSR represented by A. Vinberg, V. Bezrukov, M. Mayorov and R. Todorov, after which a new section of criminology create - forensic odorology. Currently, there are disputes in science regarding the use of the odorological method in proving. Therefore, for example, Strogovich M.S. entered into controversy with the founders of this method, arguing that it is scientifically unfounded and legally unfounded [1; P. 270].

In the Republic of Uzbekistan, the initiator of the creation of an expert service within the Ministry of Justice, then still the Uzbek SSR, was Khadicha Sulaymanovna Sulaymanova, a legal scholar, Doctor of Law, Professor, Academician of the Academy of Sciences of Uzbekistan. She made a huge contribution to the development of legal science in the Republic [2; P. 271-274].

In February 2016, the journal PLOS ONE published a study by neuroscientists at the University of Lyon, who, based on the material of the forensic laboratories of the French police, concluded that in 80-90% of cases, detector dogs correctly recognize a person's individual smell. [3].

The emergence of forensic odorology was facilitated by the development of technical and natural sciences, namely, this was facilitated by the development of gas chromatography, mass spectroscopy methods [4; P. 10-13].

Odorological examination is one of the "youngest" methods of obtaining evidence in the

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process of detecting and investigating crimes. The object of this examination is the smell of a person.

In investigative practice, an odorological examination is carried out in cases where there are no widespread traces left by the criminal at the crime scene, except for odor traces, since it is more difficult to get rid of them than from human traces such as traces of hands, feet or blood. When following the procedurally necessary rules for the seizure of odor traces and professionally performed laboratory identification, the odor left at the crime scene can be used as material evidence along with other traces.

However, it should be noted that, despite the large number of opponents of this method, it is used in practice, but at the moment in European and Central Asian countries there is no necessary number of relevant laboratories, which negatively affects the development of both the science of forensic odorology and the accumulation of the practice of solving crimes by odor traces. To date, such examinations are increasingly being appointed by investigators and courts, despite the fact that scientists still cannot come to a consensus on the appropriateness and validity of odorological research.

Odor traces are mainly investigated by means of the odorological (olfactory) method, the essence of which is the collection and preservation of odor traces during both investigative actions and subsequent laboratory research (odorological examination) [5; P.415].

When committing any intentional crime, the person who committed it seeks to destroy traces, but it is very difficult to eliminate odor traces. The smell of a person, of course, can be called his chemical "signature". This is determined primarily by its individuality, as well as the ability to easily penetrate clothes, shoes, and other objects and remain on them for a rather long time (practice shows that a smell trace removed in accordance with established rules does not lose its properties for several years. These features of odor traces make it possible to use the information contained in them to solve complex crimes of past years or crimes, during the investigation of which no other evidence was found. [6].

Smell is a property of a material object or substances contained in it, which can be perceived by the sense of smell of a person or animal. Odorous components characterize a person and are presented in his body in the form of free fatty acids - metabolites.

Individual (personal) odor is a genotypically determined property of specific substances in the subject's sweat, blood, perceived by detector dogs. The personal smell of a person is not affected by his life, occupations, habits, and the presence of such additives in odor samples is taken into account when conducting a study. [7].

The odor trace of the subject is a micro-quantity of smelling substances that characterize the individual characteristics of the body of a given person; is formed on objects (objects) as a result of contact interaction with them of the subject or things that have its smell.

Odor traces are gaseous formations, which largely distinguishes them from traditional material traces of which lies in their inherent dynamism. The formation of an odor trace occurs with the constant transition of a substance from a liquid or solid state to a gaseous state. This determines the fact that the object will be a source of smell as long as molecules of the substance are separated from its surface into the environment. So, for example, the source of odor traces will be a crime weapon (knife, ax, etc.), on which the criminal's sweat and fat traces are left, while these traces evaporate from its surface, in particular, the handle [8]

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Collected and executed in accordance with the norms of the Code of Criminal Procedure of the Russian Federation, odor traces and objects with odor information are material evidence, and all the norms of the criminal procedure law relating to work with material evidence are applied to them. Unfortunately, in the Criminal Procedure Code of the Republic of Uzbekistan, objects with smell information are not material evidence.

It is a well-known fact that in animals, insects, and fish, the sense of smell in terms of perception to a large extent exceeds the currently existing devices. In this regard, animals are often used to detect and recognize odors, for example, they can detect mineral deposits, locate faults in gas pipelines by traces of gas leaks, and, of course, their abilities are widely used in order to find objects that are sources of smell.

It is noteworthy that the use of odorological information in the process of solving and investigating crimes began quite a long time ago, in particular, there are references to this dating back to the 19th century. So, for example, in Austria in the city of Hildesheim, on the initiative of one of the founders of forensic science, Hans Gross, 12 dogs began to be used to serve with the police.

Currently, scientists and law enforcement officials in most modern states recognize the results of an olfactory or odorological examination. Therefore, for example, odorological studies are carry out in a number of expert institutions of the system of the Ministry of Internal Affairs of the Russian Federation, the Republic of Belarus, Latvia, Lithuania and a number of other foreign countries (Belgium, Hungary, Germany, Holland, Denmark, the Netherlands, Poland, Slovenia, Czech Republic, etc.).

Odorological studies are carry out in stationary conditions by comparing odor samples from odor carriers seized at the scene of the incident and odor samples submitted for comparison, obtained from persons being checked in the case under investigation. For such a study, specially trained laboratory dogs - biodetectors - and sets of outwardly uniform odor objects (odor simulators) are used as odor detectors, which allow, by the reactions of biodetectors, to identify one or another feature in the studied odor samples (individualizing odor, odor of a biological species, and so on) . As in instrumental research methods, the subject of odorological research is not a detector dog, but a specialist. Animals themselves do not reveal the forensic signs of the studied odor samples, but as bioindicator devices they serve as a tool in the hands of experts. However, there is no consensus among criminologists on the issue of using the results of odorological studies not only in solving crimes, but also in the process of proving. So, for example, in the work of N.G. Alishunast-Levina and V.I. Shikanov, an example of an experimental test was given, which showed that service-search dogs are not able to reliably identify people by smell and act on the principle of the greatest similarity: in the absence of a person from whom the "smell test" shown to the dog was taken, the dog chooses another person who is similar in smell [nine; C. 53]. Regarding the inadmissibility of evidentiary use of the results of a canine sample, such forensic scientists as R.S. Belkin, M.S. Strogovich, V.I. Shikanov, N.N. Tarnaev, A.I. Vinberg [10; P. 76].

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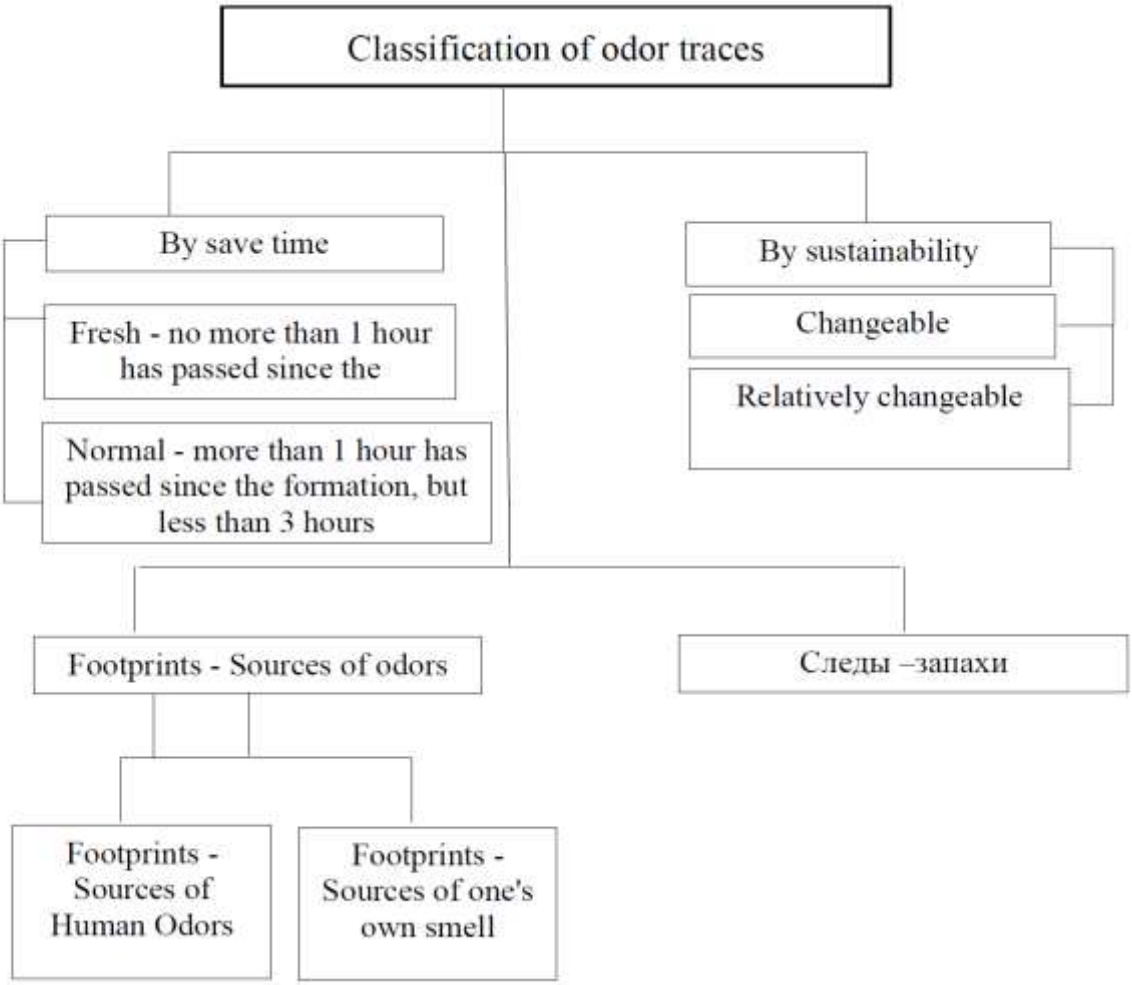
The value of using sniffer dogs in identifying a certain person by their smell is as follows: sniffer dogs quite accurately sample people by sampling odorous substances from indoor air, even if they were present in the room for only 10-15 minutes. Usually, sweat and blood odor substances are used as sources of individual human odor. The individual smell of a person is a property of odor substances such as: sweat, facial blood, perceived by detector dogs as its special, unique characteristic. At the same time, the personal smell of a person is only to a small extent determined by his life, occupations, habits. The presence of these components in the odor samples received from the subject must be taken into account when conducting an odorological study. [11].

Odorological examination is often called an informal way to determine the true suspect in a criminal case. Supporters of this examination note the fact that it requires certain skills from the forensic specialist, the ability to remove odors from the scene, or from the victim or suspect. Also a big role in this examination is played by the fact that laboratories in Russia that conduct odorological examination in accordance with all the rules can be counted on the fingers of two hands. The problem is also worth noting the small number of experts in our country with the necessary baggage of knowledge for the correct and procedural and legally competent disclosure of a criminal case, in which only otorological examination is used and no other, since courts often do not equate this examination with direct evidence due to their incorrect application. (illiterate removal of odor traces, often mixing them, which gives the court reason to believe about inaccurate laboratory tests and, as a rule, an erroneous idea of a possible suspect in a criminal case) [12].

In order for a study conducted with the use of such a specific subject of perception as a detector dog to be successful, the expert needs to control two factors:

1) providing favorable conditions in which the behavior of the detecting dog will be predictable and unambiguous;

2) constant assessment by the expert of the reflex signals of the dogs used for their adequacy.



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It is precisely in creating favorable conditions for the examination, in its correct formulation and subsequent interpretation, that the main problem of odorological examination is seen.

Undoubtedly, the use of service dogs allows you to quickly identify the person who committed the crime (in hot pursuit). However, this method is not always applicable in practice. So, depending on the method used to train dogs, the end result can also be differentiated. For example, in the United States, when training service dogs, the approach is used, according to which dogs are allowed to freely follow natural instincts with the ability to independently choose the path and speed of following, often without the participation of an expert. The "results" of such training are very successful: more than 90% of criminals are identified.

In the USA, the olfactory abilities of dogs are used to detect scent traces, which are involved in the following cases:

- to pursue and identify criminals in "hot pursuit";
- to determine the route of movement of participants in the event to the crime scene
- to conduct an operational "cynological sample";
- during a search in the premises or on the ground in order to search for lost or hidden items that are directly related to the crime;
- to search for buried corpses, weapons, drugs or explosives;
– as a biodetector in the production of odorological expertise [13].

As for the work with odor traces, it does not cover:

- study of the situation at the scene, identifying the likely locations of odor traces and measures to ensure ix security;
- taking measures to identify objects on which odor traces can be protected;
- the use of a pink dog to detain a criminal on a hot trail, as well as to detect lost items that have traces of the smell of a criminal; I am second.

At the same time, the situation with the use of cynological odorology is "easier" not only when offenders use certain types of odors that irritate the mucous membrane of a service dog (for example, as a result of the use of a sharp pen), there is also no need to identify individual components of such a smell. Therefore, this is the need for driving and the development and implementation of special "devices" [14; P. 146-157].

The role of olfactory expertise is comparable in value to fingerprinting and DNA analysis. With the advent of new methods of olfactory examination, new opportunities for investigating cases of past years have appeared. If the study of DNA over time and certain conditions becomes impossible due to the degradation of cell nuclei and chromosomes, then odor traces remain longer and their analysis allows solving identification problems after many years. Such an examination is especially indispensable when a crime is committed in conditions of non-obviousness. [15; P. 271-274].

In our opinion, it is necessary to introduce olfactory and odorological expertise through the use of information technology in production, which in turn should go in the following areas:

1. Collection of samples to create electronic databases. In this case, individual "smell" components should be "encoded" in some way, which will make it possible to identify them in the future when studying similar and adjacent smells.

2. Development of automated devices that recognize odor traces based on the created databases and allow identifying similar odors (for example, by the subject of belonging to one person). As an example, one should cite such devices that allow the use of complex gas bodies currently used in forensic practice, such as a chromatograph and a mass spectrometer. The principle of operation of these devices is reduce to the separation of odors into the smallest units (ions) for their subsequent registration. [16].

3. The use of computer tools that make it possible to identify "smell" traces at the crime scene and collect them for subsequent use in experimental activities.

4. Development of software that allows, on the basis of the identification of "smell" traces, to draw up expert opinions on the identification of such traces, their assignment to a specific group.

The indicated directions of development of the modern science of odorology make it possible to automate the procedure for the production of odorological examinations, should be reduce to the development of standard algorithms, which are reduced to the performance of predetermined tasks.

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