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CERTAIN ASPECTS OF FORENSIC EVIDENCE IN UKRAINIAN POLICE

Global progress produces development of new different technologies without which it is impossible to work the law enforcement agencies. Because this gadgets are used for the entire process of investigation crime and their using contributes more fully understanding of the place of crime, obtaining information about evidence, etc. The current legislation does not impose restrictions on the use of traditional or digital photography technology. From the point of view of the criminal procedural law, the technology of forming a photographic image is not important. Decisive is the receipt of qualitative data that meets the requirements of membership, admissibility and authenticity.

Certain aspects of the use of technical equipment have been repeatedly considered by criminologists. Problems of the development and implementation of innovative technologies in the practical activities of law enforcement agencies were given attention in their works by domestic and foreign scholars: V. Biryukov, V. Shepitko, R. Belkin, V. Konovalova, I. Krylov, M. Salt'evsky, O. Rossinskaya, M. Tsymbal, M. Sega and others. The questions were devoted to the development and improvement of methods and techniques of photography, the range of objects, the list of tasks. However, the means and methods of forensic provision used in practice can't always fully satisfy the requirements of criminal justice.

The introduction of innovations in investigative activities is carried out in the following areas:

- 1) development and using of new scientific and technical resources for the detection, collection and preliminary research of evidence;
- 2) offering the modern information technologies and their using in the work of the investigator;
- 3) the creation and offering of techniques, methods of conducting investigative actions and investigations in general [1, p. 91].

In recent years, special attention has been paid to the development of effective tools, techniques, methods, methods for identifying and researching verbal information (obtained on the basis of linguistic communication), which

АКТУАЛЬНІ ПРОБЛЕМИ ЕКСПЕРТНОГО ЗАБЕЗПЕЧЕННЯ ДОСУДОВОГО РОЗСЛІДУВАННЯ

will facilitate the expansion and strengthening of the evidence base on criminal proceedings. In the conditions of the current state of crime, the needs of law enforcement agencies in the development of new and improved previously developed scientific and technical means aimed at working with the ideal tracks significantly increased. The specified task can be solved by means of introduction of modern information and innovative technologies aimed at updating the ideal traces.

Recently, the introduction of an investigative and expert practice of a new method of restoring the trace of the memory of the exterior of the wanted person using a computer program and computer graphics tools for the purpose of constructing photocomposition portraits from the words of witnesses.

This is a system of “RAIPS-portrait” that was developed at the Research Institute for the Study of Crime Problems National Academy of Law Sciences of Ukraine. This method, implemented in the “RAIPS-portrait” system, is based on the consideration of the psychological peculiarities of perception, recall, recognition and reproduction of human appearance and the activation of the associative memory of an witnesses in the memory of a previously observed person and fixing a subjective image in the form of a picture that gives the ability to make a photo work even in the presence of negative factors (poor observation conditions, emotional state of the victim, etc.).

The “RAIPS-portrait” implemented in the system, the reflection method in the work of the ideal track, facilitated the creation of an electronic catalog of composite photographs. In the process of compiling a computer photo, updating (restoring) the trace of memory of appearance is carried out by using different ways of activating associative connections.

When compiling a computer image using the “RAIPS-portrait” system, some experts in technical techniques include the possibility of returning to any point of the algorithm (that is, compiling a verbal portrait, searching for a group of similar portraits, forming a group of similarity, constructing, retouching and preserving the photo) and re-executing the relevant procedures with the preservation of the results previously obtained.

As an example, we can give statistics for 2000-2006. In 2000, by Order of the Ministry of Internal Affairs of Ukraine No. 1 the Ministry of Internal Affairs introduced using of polygraphs in the human resources and operative-search activities of units in the fight against organized crime.

During 2000-2006, 1757 interviews were conducted on polygraph personnel, including 1020 in the case of operational searches and 737 in personnel issues, in particular, about 230 people were involved in the commission of more than 120 crimes.

Also widely used in foreign countries has been 3D-visualization of the scene, which is achieved through 3D photography or the use of 3D scanners. The result of their application can be described as a photographic model. This

model is quite objective because it relatively accurately reflects the situation of the event, but not characterized by flexibility, because it usually contains objects as related and those that do not relate to the event, which may there is a need to change the actual content [2, p. 43].

As the US «3Ders» edition says, the police station in Roswell, New Mexico, recently acquired the Faro 3D scanner, which will enable the investigator (and potentially and the ships) to produce 3D-visualization of the crime scene - a digitized panoramic view of the scene [3, p. 136].

Policemen say that the information will be provided up to "a couple of millimeters," so investigators, judges and jurors will have "a very precise graphic representation of what was the site of the place of crime." It is believed that this will be a step towards the qualitative improvement of the known ways of fixing the place of the event using a standard camera, and that it can really prevent possible mistakes that are sometimes allowed by law enforcement agencies.

In order to save money, the Baltimore's Police Forensic Laboratory technicians turned an inexpensive program designed to repair buildings, into a tool that clearly demonstrates how murders, rapes, and the others crimes occurred. Using Floor Plan Plus, the forensic laboratory reproduces it on the computer screen based on thumbnails and photos from the place of the crime. [2, p. 15].

Despite its advantages, modern technology also has its drawbacks. In particular, the high cost of these devices causes a very slow introduction of them into practical activities.

To sum up, using of modern technologies by the National Police in Ukraine remains an open and controversial issue. On the other hand, all possibilities allow the use of innovations in forensic technology, however, in most cases, these technologies only resort to investigate of resonance crime.

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