

The standard of forensic report veracity in criminal proceedings

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Procedural (relevance and admissibility) and epistemological (due quality of objects, accuracy of source data, approved research methodology was applied) conditions and criteria (epistemological: scientific, methodological and logical substantiation of expert conclusions, procedural: compliance with other case files) that together determine veracity of the expert conclusion are outlined.

The Article Purpose is to analyze views of scientists concerning veracity of evidence in general and the expert conclusion in particular; clarify circumstances preceding the expert conclusion and conditioning its accuracy; emphasize epistemological and procedural criteria for this characteristic and compare with the procedure for determining veracity of forensic examination in the countries of the Anglo-Saxon Legal Family and develop a standard based on which veracity of the forensic report can be established by results of performed research.

The scientific and methodological substantiation presupposes general and specific substantiation of research results of submitted objects. The logical substantiation is argumentation of the expert's interim and final conclusions. The criterion for procedural veracity of the forensic report is in its consistency, compliance with other pieces of evidence. It is advisable to use the standard of proof "beyond a reasonable doubt" to determine conformity of the forensic report with objective reality.

The standard of forensic report veracity implies that conditions of relevance and admissibility of the forensic report are met, objects

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submitted for forensic examination are of appropriate quality, expert conclusions are based on general scientific and methodological provisions and results of a particular expert research stemming from them, logically reasoned, conformed with other pieces of evidence in a criminal proceeding and recognized as corresponding to actual circumstances of the offense beyond any reasonable doubt.

Keywords: forensic report, veracity, admissibility, relevance, validity, veracity standard.

Research Problem Formulation

The purpose of the proof process in criminal proceedings is generation of credible knowledge on circumstances of the offense based on veracious evidence, which is explicitly stipulated in Art. 94 of the Criminal Procedural Code of Ukraine¹. The forensic report is not viewed as a special source of evidence, and determination of its veracity is regulated during its evaluation according general rules. However, evaluation of the forensic report veracity (unlike other procedural sources) has significant peculiarities provoking major difficulties in law enforcement agencies, and among scholars: multiple discussions. In our opinion, in contrast to clearly defined concepts of veracity and relevance as procedural pieces of evidence, explication of the concept of veracity/inveracity of forensic report that is evaluated in content and not by formal grounds is not disclosed in law. The second reason is associated with the possibility of a comprehensive evaluation of the forensic report veracity by examination commissioner.

There are opposing views on comprehensive evaluation of the forensic

report. Some scholars argue that the court, prosecutor, investigator may and should assess not only the logic of the expert proof, but also to understand the scientific provisions suggested by the forensic expert to ensure veracity and integrity of conclusions² developed by the forensic expert. We adhere to the views of those lawyers who believe that a variety of forensic examination tasks, emergence of new genera and types of forensic examinations based on the most up-to-date scientific technologies, development and advancement of forensic expert methodologies make them hard to understand by a person (body) who assigned a forensic examination, constantly increase the range of issues in assessing scientific validity of expert researches, in connection with which the initiator of the expert involvement is not able to comprehensively and qualitatively evaluate veracity of the forensic report³. It should be stressed that differences in understanding of forensic report veracity condition adoption by law enforcers of various decisions in specific criminal proceedings.

In the literature on forensic report evaluation, the concept, conditions

- 1 Кримінальний процесуальний кодекс України від 13.04.2012 р. № 4651-VI (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/4651-17#Text> (date accessed: 10.11.2021).
- 2 Белкин Р. С., Винберг А. И., Дорохов В. Я., Карнеева Л. М. и др. Теория доказательств в советском уголовном процессе ; отв. ред. Н. В. Жогин. Москва, 1973. С. 726.
- 3 Аверьянова Т. В. Судебная экспертиза. Курс общей теории. Москва, 2009. С. 466.

of achievement and ways to measure veracity of the forensic report are partially discussed, but the content of the forensic report veracity is not entirely disclosed, and methods of measurement are not separated from the rest associated with other peculiarities of the expert conclusion as a source of evidence. Evaluation as a mental act measure compliance or incompliance of the evaluated object with any pre-determined requirements (criteria). To properly evaluate the object, it is necessary, first of all, to determine which requirements should be put forward for this object. With reference to the above, we need to discuss criterion of veracity as one of the most essential characteristics of the expert conclusion. Consequently, the concept of forensic report veracity is the subject for lengthy discussions, and the criteria of the forensic report veracity necessitate further research and clarification.

Analysis of Essential Researches and Publications

Research papers of domestic and foreign scientists, such as: T. V. Averianova, L. Yu. Arotsker, V. D. Arseniev, A. R. Bielkin, R. S. Bielkin, V. F. Berzin, A. R. Vorobchak, L. M. Holovchenko, V. H. Honcharenko, O. P. Hryshyna, O. M. Zinin, N. I. Klymenko, O. M. Kliuiev, Yu. H. Korukhov, O. A. Kravchenko, S. P. Lapta, V. K. Lysychenko, S. V. Nemira, I. V. Ovsiannikov, Yu. K. Orlov, N. A. Panko, A. K. Pedenchuk, I. A. Petrova, A. N. Petrukhina, M. O. Podolnyi, A. I. Ripenko, O. R. Rossynska, O. S. Rubis, T. V. Sakhnova, K. P. Sylenok, E. B. Simakova-Yefremian, S. A. Smirnova, V. V. Tishchenko, O. P. Uhrovetskyi, V. V. Khosha, B. V. Shabarovskyi, V. D. Yurchyshyn, S. A. Yalyshev, the author of these lines and other specialists⁴ are dedicated to research

4 Клименко Н. І. Судова експертологія. Курс лекцій. Київ, 2007. 528 с. ; Орлов Ю. К. Судебная экспертиза как средство доказывания в уголовном судопроизводстве. Москва, 2005. 264 с. ; Щербаковский М. Г. Проведения та використання судових експертиз у кримінальному провадженні : монографія. Харків, 2015. 560 с. ; Аверьянова Т. В. Ор. cit. 480 с. ; Белкин Р. С. Собираение, исследование и оценка доказательств. Сущность и методы. Москва, 1966. 295 с. ; Лисиченко В. К. Особенности проверки и оценки заключений экспертизы на предварительном следствии и в суде. *Криминалистика и судебная экспертиза*. 1982. Вып. 24 ; Немира С. В. Достоверность заключения эксперта в уголовном процессе : автореф. дис. ... канд. юрид. наук. Краснодар, 2016. 28 с. ; Педенчук А. К. Заключение судебного эксперта: логика, истинность, достоверность : автореф. дис. ... д-ра юрид. наук. Москва, 1995. 48 с. ; Россинская Е. Р. Судебная экспертиза в гражданском, арбитражном, административном и уголовном процессе : монография. Москва, 2020. 576 с. та ін. ; Ключев О. М., Сімакова-Єфремян Е. Б., Хоша В. В. Судова-експертна діяльність в Україні: збірник нормативно-правових актів : чинне законодавство станом на 1 верес. 2020 р. / упоряд.: О. М. Ключев, Е. Б. Сімакова-Єфремян, В. В. Хоша. Харків, 2020. 416 с. ; Ключев О. М., Угровецкий О. П., Сімакова-Єфремян Е. Б., Петрова І. А. та ін. Судові експертизи в адміністративному провадженні : навч. посіб. Харків, 2021. 288 с. ; Ключев О., Сімакова-Єфремян Е. Доктринальні підходи до судової експертизи в Україні. *Право України*. 2021. № 8. С. 28—43 ; Сімакова-Єфремян Е. Б. Проблеми використання висновку експерта у кримінальному провадженні. *Проблеми теорії та практики кримінального провадження* : мат-ли кругл. столу (Харків, 17.06.2021). Харків, 2021. С. 54—57 ; Ріпенко А. І., Тіщенко В. В., Самойленко О. А., Сімакова-Єфремян Е. Б., Петрова І. А. та ін. Судові експертизи у кримінальному провадженні : посібник. Одеса, 2021. 152 с. ; Simakova-Yefremian E., Sylenok K. Current Directions of Development of International Cooperation of Forensic Science Institutions of Ukraine in The Fields Historical Forensics, Forensic Archaeology and Aerospace Forensics. *Integrated computer technologies in mechanical engineering – synergetic engineering. ICTM'2021* : proceedings, 28—29 Oct. 2021. Kharkov, Ukraine. Cham : Springer, 2021 та ін.

on theoretical issues and development of practical guidelines and evaluation as well as measurement of the forensic report veracity.

Numerous research papers where the issues of the forensic report evaluation, including the veracity of the expert research have been published. However, guidelines provided in them for evaluation of the forensic report in the investigative and judicial practice are not entirely implemented. If forensic report evaluation regarding relevance (opportunities to use while proof) and admissibility (conformity with type of procedural document, competence of forensic expert, procedure for performing forensic examination and other procedural requirements) does not pose difficulties, and it is carried out by the examination commissioner, then the establishment of veracity of expert research results becomes a complicated matter. Investigative bodies and courts make the following common mistakes: lack of evaluation in conclusions veracity, unconditional trust to conclusions in forensic report, overestimation of their probative value (especially when established facts do not contradict the rest of evidence in proceedings). It is deemed that if results of expert research are based on scientific foundation, then there is no doubt on their veracity which is due to subjective and objective factors. The first is excessive trust of the investigator, prosecutor, judge in the forensic expert as an impartial informed person (especially if he/she is an employee of a state specialized expert institution or service), the second is a real failure to comprehensively assess the scientific validity of the expert research by

participant in case who does not possess required specific expertise.

In the middle of century, the following opinion prevailed: investigators and judges are so intellectually developed that on the basis of acquired legal knowledge they are also familiar with methodologies for conducting forensic examinations and are able to assess the scientific validity of conclusions⁵ drawn by the forensic expert. We believe that such conviction is associated with consideration of so-called traditional examinations (handwriting, ballistics, trace evidence, portrait, question document) in criminalistics, external simplicity and clarity of which create the illusion of accessibility and full understanding of the process of its conduct and obtained conclusions. Over time, scientific and technological progress in the field of court proceedings has significantly enriched the range of forensic examinations, their toolkit, promoted the development and application of new research methods, which complicated evaluation of the scientific validity of the forensic report by a non-specialist.

Objective inability of employees to learn about scientific peculiarities and methodological foundations of conducting expert researches has become obvious. A famous researcher-criminalist R. S. Bielkin who once considered the possibility of a comprehensive evaluation of expert conclusions by investigators and judges (in particular, scientific validity), later came to the conclusion on objective inability of lawyers to do ⁶ this. However, as of today, we can find guidelines for investigators to evaluate scientific validity of methodologies ⁷ used by the forensic expert.

5 Лисиченко В. К. Ор. cit. С. 33 ; Судебные экспертизы. Возможности. Подготовка материалов. Назначение. Оценка. Киев, 1981. С. 83.

6 Белкин Р. С. Криминалистика: проблемы сегодняшнего дня. Злободневные вопросы российской криминалистики. Москва, 2001. С. 213—214.

7 Немира С. В. Ор. cit. С. 143.

Article Purpose

This Article Purpose is to analyze views of domestic and foreign scientists concerning veracity of evidence in general and expert conclusion in particular; determine circumstances preceding the expert conclusion and conditioning its veracity; emphasize epistemological and procedural criteria of this characteristic and development of a standard under which veracity of the expert conclusion can be determined by results of expert research evaluation.

Main Content Presentation

The concept of *veracity* is disclosed differently in philosophical and procedural literature. From the philosophical, epistemological standing, four approaches may be distinguished. According to the first interpretation, veracity is fully consistent with the truth, it is viewed as something that “*does not cast doubt, entirely correct, accurate*”⁸, “*corresponds to reality, truth*”⁹. Veracity is expressed through the truth of what necessarily follows from the universal nature, cognition laws or from the obvious, carefully verified facts¹⁰. In the second approach, veracity is interpreted as a form of truth existence substantiated in

any method (for example, with the help of experiment, logical consequences)¹¹. In the third approach, veracity is defined as a characteristic of a certain level of knowledge that is valid, proven, indubitable, true, firmly established¹². The fourth approach does not link veracity to the truth, and (referring to etymological origin) believes a veracious conviction is the one that is founded on knowledge and excludes any doubt¹³. The classic law dictionary which defines terms and phrases of American and English jurisprudence, interprets *veracious* as *trustworthy, worthy of confidence*¹⁴.

In criminal proceedings, veracity is interpreted within the limits of indicated philosophical and epistemological models that researchers prioritize. Without resorting to discussions on available standpoints in the legal literature, let's emphasize only basic scientific positions.

In the procedural science of the second half of the XX century, based on prevailing ideology, veracity was most commonly identified with the objective truth. It is proved that veracious evidence is the same as true¹⁵. Veracity of evidence as a correspondence of their content to something that took place in reality or proper reflection of circumstances of objective reality is also shared by modern domestic

8 Словник української мови. В 11 т. ; за ред. І. К. Білодіда. Київ, 1970—1980. Т. 2. 1971. С. 388.

9 Словарь современного русского литературного языка. В 20 т. ; гл. ред. К. С. Горбачевич. Т. 4. Москва, 1991. С. 423.

10 Брокгауз Ф. А., Ефрон И. А. Энциклопедический словарь: современная версия. Москва, 2002. С. 207.

11 Большой энциклопедический словарь ; гл. ред. А. Н. Прохоров. Москва ; Санкт-Петербург, 2000. С. 373.

12 Философский энциклопедический словарь. Москва, 1983. С. 176 ; Энциклопедия эпистемологии и философии науки ; под ред. И. Т. Касавина. Москва, 2009. С. 211—212.

13 Краткая философская энциклопедия. Москва, 1994. С. 143.

14 Black's Law Dictionary ; By Black H. C. 4th edition. St. Paul, Minn ; West Publishing Co, 1968. P. 1455.

15 Строгович М. С. Материальная истина и судебные доказательства в советском уголовном процессе. Москва, 1955. С. 99.

lawyers¹⁶. Veracity in this interpretation coincides with the truth (objective reality). Another interpretation of evidence veracity is to adequately present tangible and intangible traces of the event being studied¹⁷. Such approach more accurately corresponds to the epistemological nature of proof, singling out real objective events, phenomena, things from subject of their perception¹⁸. With no links to the concept of truth, veracity is viewed as a state of conviction derived from a set of collected and submitted evidence¹⁹; subjective confidence, internal conviction of a person who assesses evidence, in availability or missing of certain facts concerning availability or lack of circumstances that are essential for criminal proceedings²⁰. The majority of researchers-processualists view the *veracity* concept both as the truth of knowledge and justification addressed to a corresponding entity²¹. Veracity is understood as substantiated, proven knowledge which truth does not cast doubts²². The fact of objective truth is considered as a reality, independent “from its perception by a researcher, from its

*cognition, from gaining insight ... Reliable or possible can be knowledge about facts, results of research on evidence”*²³. Thus, according to these lawyers, veracity is not the same as truth, but an important requirement of reliability of evidence in criminal proceedings consider is considered to be its validity.

Therefore (as opposed to the truth, which according to ontological concept coincides with objective being) veracity as property of procedural evidence in an epistemological aspect should be substantiated, it is established during evaluation, it may vary for different participants in a process. Uncertain interpretation of evidence veracity is as a rule due to differences in defining the concept of veracity of a forensic expert among scientists in the field of forensic science.

N. I. Klymenko believes that forensic expert's conclusions which are fully compatible with the subject matter of cognition, are recognized as the objective truth, that is, reliable²⁴. In view of O. R. Rossynska and S. F. Bychkova,

- 16 Антонов К. В., Сачко О. В., Тертишник В. М., Уваров В. Г. Теорія доказів : підручник. Київ, 2015. С. 63 ; Павлишин А. А. Достовірність доказів / Велика українська юридична енциклопедія. У 20 т. Т. 19. Кримінальний процес, судоустрій, прокуратура та адвокатура. Харків, 2020. С. 209.
- 17 Михеенко М. М. Доказывание в советском уголовном судопроизводстве. Киев, 1984. С. 18.
- 18 Кримінальний процес : підручник ; за заг. ред. О. В. Капліної, О. Г. Шило. Харків, 2018. С. 160.
- 19 Юридические основания достоверности доказательств / сост. Н. А. Терновский ; под ред. В. А. Томсинова. Москва, 2011. С. 28.
- 20 Сергеєва Д. Б. Поняття та сутність достовірності доказу як його властивості. *Юрист України*. 2014. № 1. С. 91. URL: http://nbuv.gov.ua/UJRN/uy_2014_1_14 (date accessed: 10.11.2021).
- 21 Бандурка О. М., Блажівський Є. М., Бурдоль Є. П. та ін. Кримінальний процесуальний кодекс України. Науково-практичний коментар. У 2 т. Т. 1 ; за заг. ред. В. Я. Тація, В. П. Пшонки, А. В. Портнова. Харків, 2013. С. 289–290 ; Кримінальний процесуальний кодекс України. Науково-практичний коментар ; за заг. ред. В. Г. Гончаренко, В. Т. Нора, М. Є. Шумила. Київ, 2012. С. 262.
- 22 Теория доказательств в советском уголовном процессе ; отв. ред. Н. В. Жогин. Москва, 1973. С. 287.
- 23 Белкин Р. С. Опр. cit. С. 59–61.
- 24 Клименко Н. І. Опр. cit. С. 168.

conclusion veracity is conditioned by the fact whether results of expert research²⁵ reflect the reality. A. K. Pedenchuk singles out three types of forensic report veracity: full (function of scientific knowledge and subject), scientific (function of state of science and technology, scientific knowledge of the subject of knowledge), specific (unites all types of veracity in the real process of solving theoretical or practical tasks)²⁶.

O. O. Eisman highlights that research conclusion or forensic report's statement are veracious, the truth of which is provided and guaranteed by the appropriate choice of research methods or methods of reasoning²⁷. Yu. K. Orlov believes that veracity contains both the truth of the forensic report (compliance of logical consequences of a forensic expert with objective reality) and validity (reasonableness, argumentativeness) of a conclusion²⁸. From our perspective, the last interpretation of the forensic report veracity is the most accurate, at the same time, the issue of criteria of conformity of forensic expert's logical consequences with objective reality remains open.

We are of the view that in order to disclose the content of forensic report veracity, it is essential to consider three components: conditions that determine veracity of expert research; criterion of epistemological veracity of research and

criterion of procedural veracity of the report as a source of evidence.

Before the logical consequence of the forensic expert affect a conclusion and become evidence that is recognized as veracious, it is necessary to establish conditions compliance with which will help to recognize facts provided by the forensic expert as veracious. At the beginning of XXth century, L. Ye. Vladymyrov, Professor of Kharkiv University emphasized: "*Veracity of forensic examination depends on a whole range of assumptions, and evaluation of its significance by judge lies in logical operation of determining existence of conditions being credible for forensic expert's opinion*"²⁹. Conditions of forensic report's veracity were partially discussed in literature³⁰, but this problem requires further analysis, and conditions: a clearer distribution.

We believe that law (procedural) and epistemological (cognitive) conditions for veracity should be outlined in the forensic report. Procedural conditions include admissibility and relevance of a forensic report as one of the sources of evidence. For a reason, in accordance with Art. 94 of the Criminal Procedural Code of Ukraine, evidence evaluation is carried out starting from the determination of relevance and admissibility and only then: veracity. Relevance of the expert research results lies in the fact that facts established by the forensic expert should constitute fact in

25 Россинская Е. Р. *Op. cit.* С. 46 ; Бычкова С. Ф., Бычкова Е. С., Калимова А. С. Судебная экспертиология. Курс лекций. Алматы, 2005. С. 137.

26 Педенчук А. К. *Op. cit.* С. 41—42.

27 Эйсман А. А. Заключение эксперта. Структура и научное обоснование. Москва, 1967. С. 111.

28 Орлов Ю. К. *Op. cit.* С. 132—143.

29 Владимиров Л. Е. Учение об уголовных доказательствах. Тула, 2000. С. 266.

30 Щербаковский М. Г. Условия формирования достоверного заключения эксперта. *Теорія та практика судової експертизи і криміналістики*. 2013. Вип. 13. С. 232—241 ; Бутырин А. Ю., Трифонова З. В. Обеспечение достоверности выводов в заключении эксперта при производстве судебной строительно-технической экспертизы. *Теория и практика судебной экспертизы*. 2017. Т. 12. № 3. С. 78—84. URL: <https://moesnsk.ru/upload/medialibrary/311/3117b926e4edcbb7b8960293e734e36.pdf> (date accessed: 20.12.2021) та ін.

proof or to find out other circumstances essential for criminal proceedings. With the use of conclusions developed by the forensic expert, these facts can be determined and proven. Admissibility of the forensic report in general terms means compliance with law, criminal procedure rules while appointment, conduct of forensic examination, registration and submission of its results as forensic reports to a commissioner. The law defines the measure of the behavior of criminal proceeding participants to regulate the process of forming the forensic report as a source of evidence. Clearly, the forensic report may be recognized as veracious when it is admissible as a source of evidence. Admissibility is a way set out by law to ensure veracity of the forensic report, its high quality. Among numerous legal requirements put forward to a forensic report to comply with its admissibility, one can distinguish the essential ones, which, in our opinion, directly affect veracity of research results: legal capacity of participants in criminal proceedings in involvement of the forensic expert; the need to use forensic examination as the form of specific expertise; legality of collection and authenticity of expert research objects (for example, admissibility and veracity of origin of samples from the object being checked); compliance with requirements of the Law of Ukraine *On Judicial Examination* concerning an informed person involved as a forensic expert; lack of violations of rights and responsibilities in a forensic expert while forensic examination; appropriate procedural implementation of research results and its presentation in forensic report, etc. In case of non-compliance with the above conditions, the forensic report may not be recognized either admissible or veracious.

Epistemological conditions of the forensic report veracity include good quality of examination objects, accuracy of source data, availability of approved expert research methodology. The high-quality are considered to be objects suitable for research, which qualitative and quantitative characteristics are necessary and sufficient for forensic examination to solve addressed expert tasks. This characteristic depends on methodologies, technical means for searching and extracting objects, from conditions for further transportation and storage, as well as methods for providing them to the forensic expert. Properly selected, preserved and provided in the required volume to the forensic expert objects are the basis for obtaining a veracious conclusion of the forensic expert on the availability or lack of investigated facts. Another prerequisite for the veracity of the appointed examination is approved scientifically developed methodologies for performing expert research, information about which is available in the Register on the corresponding website of the Ministry of Justice of Ukraine ³¹.

To disclose the direct essence of the forensic report veracity, it should be stressed that in theory and practice it is vital to view veracity as a characteristic of the degree of validity of logical consequences by results of performed research and veracity of the forensic report as a procedural source of evidence that combines the content and form. It worth noting that in the scientific and methodical literature, guidelines for evaluating veracity of the forensic report are most often provided without taking into account the specified differentiation.

Given the definition of veracity as validated knowledge, one can emphasize the criterion of the epistemological veracity

31 Реєстр методик проведення судових експертиз. URL: <https://rmpse.minjust.gov.ua> (date accessed: 20.12.2020).

of expert research or forensic expert's logical consequences which include two components: scientific and methodological substantiation and logical substantiation of the expert's logical consequences. According to Yu. K. Orlov, the expert conclusion is formulated as a result of the use of general scientific provisions and specific data on studied object ³². Accordingly, there are two levels of scientific and methodological substantiation of the forensic expert's logical consequences: the first: general scientific and methodological substantiation including the use by the forensic expert of general research results, theories, guidelines and methodologies (techniques, methods, means, materials) of research, given their capabilities and veracity; the second one is a specific scientific substantiation of forensic examination results based on application of an approved typical expert research methodologies, most suitable for the objects provided in appointed forensic examination to solve addressed tasks. Full and multidisciplinary research involves application of the chosen expert methodology (sequence of actions); interpretation of received data, defining their importance for solving posed tasks (block of analysis); substantiation of interim and final logical consequences (synthesis block).

An expert response to addressed questions justifies a set of arguments with the use of logic laws. Specificity, exceptionality of the expert conclusion lies in the fact (unlike the rest of evidence types) that it presents ultimate knowledge, that is, new knowledge gained through logical consequences. Logical conclusions of the forensic expert drawn on the basis of research conducted by him have probative value. According to Art. 102 of the Criminal

Procedural Code of Ukraine, the forensic report should contain "*substantiated answers to each question*". Validity is a necessary prerequisite for drawing an expert conclusion: it ensures credibility, is a system of arguments and beliefs of the forensic expert, result of the analysis of performed research on objects. Logical coherence provides consistent presentation of stages of the expert research, description of identified features and their interpretation, presentation of interim results, absence of any inconsistencies and inaccuracies in the expert opinion, formulation of final inference resulting from the intermediate reports. Logical coherence (motivation) provides a detailed presentation of the expert's actions related to the review, comparison, calculations, quantitative and qualitative research of the objects, documents, and other information. Forensic reports should follow from the results obtained, be determined by them ³³.

The forensic report veracity should be considered as an epistemological category determined by the cognitive activity of an informed person. The next important point in establishing the veracity of information about the facts which are given the value of evidence is to determine the criterion of procedural veracity of forensic report as a source of evidence. According to the general definition, veracity means the conformity of knowledge to objective reality. A practical question arises: how exactly should the parties and court be convinced of such compliance?

The criterion of procedural veracity of forensic report can be determined by the Resolution of the Plenum of the Supreme Court, which states that in order to establish the veracity of forensic report, courts should determine not only procedural and epistemological admissibility, logical

32 Орлов Ю. К. *Op. cit.* С. 126—127.

33 Щербаковський М. Г. *Op. cit.* С. 171—172.

and scientific justification, but also the consistency of the forensic report with other case files³⁴. We should clarify: as rightly noted H. M. Rieznik, the veracity of individual evidence (in particular, the forensic report) is established by comparison with evidence relating to the same fact³⁵. In the procedural aspect, the veracity of evidence is defined as compliance, consistency of the individual evidence with other facts established in the criminal proceedings, data, and verified evidence. In contrast to the veracity of research results, which is established in relation to the content of the forensic report in isolation from the rest of the evidence, the veracity of the expert's opinion as a procedural document is finally determined in conjunction with existing evidence. Thus, the criterion of the procedural veracity of the forensic report as a source of evidence is its consistency with the rest of evidence.

From a theoretical and practical standpoint, it is advisable to consider the procedure for determining the veracity of the forensic report in the law enforcement practice of the Anglo-Saxon legal family. The sources of law in these common law countries are the rules formulated by judges, i.e., legal regulation is carried out on the basis of judicial precedents. Thus, the sources of the USA law of evidence are decisions of district courts (Courts of First Instance), Appellate district courts, Supreme Court. In addition, there are State Rules of Evidence and Federal Rules of Evidence (hereinafter referred to as the *Rules*) which govern types and means of proof, the procedure for collecting, verifying, evaluating, and using evidence.

Some rules are directly related to the assessment of relevance, admissibility and

veracity the results of the examination. According to the Rules 104 (a) *Preliminary Questions*, the judge has to determine the qualification of the expert, i.e., his competence; relevance of evidence (in particular, the expert opinion), which depends on whether he prove the existence of a fact of interest to the court. The admissibility of expert testimony is determined by two criteria. In accordance with the Rules 401 (a) *Test for Relevant Evidence*, evidence is considered to establish the fact with greater or lesser probability, and the fact is relevant to the case. The Rule 402 *General Admissibility of Relevant Evidence* proves that all relevant evidence is admissible unless otherwise provided by law or regulation. Thus, the peculiarity of American evidence law is that evidence is admissible not on the basis of compliance with the law and other procedural rules, but in the case of its ability to prove the facts to be established during the trial. Relevance is considered as one of the criteria for the admissibility of evidence, and only relevant evidence is considered admissible.

According to the Rule 702 *Testimony by Expert Witnesses*, "a witness who has qualified as an expert in knowledge, skills, experience, training or education may testify in the form of an opinion or otherwise if (a) scientific, technical or other specific expertise of the expert assists the fact-maker [judge, juries. — *Author.*] to understand the evidence or establish the fact being discussed; (b) the testimony is based on sufficient facts or evidence; (c) the evidence is the product of sound principles methods, as well as (d) the expert has correctly applied the principles and methods to the facts of the case".

Despite some differences in the content of domestic legal concepts and

34 Про судову експертизу в кримінальних і цивільних справах : Постанова Пленуму ВС України від 30.05.1997 р. № 8 (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/v0008700-97#Text> (date accessed: 20.12.2020).

35 Резник Г. М. Внутреннее убеждение при оценке доказательств. Москва, 1977. С. 11.

concepts used in the Rules, comparing the above rules with the conditions and criteria of the veracity of the forensic report we can specify certain similarities. Thus, only an informed person who has specific expertise, skills of their application, and has the appropriate qualification is allowed to conduct the examination. Appropriate and, accordingly, admissible is the forensic report, which establishes the fact of interest to the court. Testimony (results of examination) of the expert should be based on good quality materials submitted for research; during the examination, the expert must use known, proven scientific principles and methods, as well as apply them in specific research.

Although it is not stipulated by law, scientists have repeatedly pointed out in the literature that a judge is unable to determine the significance of evidence through isolated research of expert opinions. It is important for the subject of evidence using the forensic report to gather all the evidence, both expert and non-specialized, and to determine whether they together meet the requirements for proving certain facts³⁶.

It should be noted that the formulation of the final version of the Rule 702 was influenced by case law known as *Frye* and *Daubert*. In the USA, these standards are used in Courts of First Instance along with Federal Rules of Evidence.

In 1923, in the case of *Frye v. United States*, an accused of the murder hoped to prove his innocence with the help of a lie detector predecessor³⁷. Evidence was un-

acceptable because of the method used to obtain it: in those days, the scientific community did not accept polygraph results as evidence. The essence of the *Frye* Standard is that the court (before declaring the forensic report (testimony) admissible) must decide whether the procedure, methodology or principles on which the forensic report is based were “*generally accepted by a significant part of the relevant scientific community*”. The *Frye* Standard determined the way to verify the validity of expert testimonies, provided a uniform approach to the recognition of their admissibility in court. During the practical application of this standard, the party involved in the expert had to invite scientists to confirm the validity of the scientific data that formed the basis of the research. However, by making it easier for the court to verify the validity of expert testimony by simply comparing it with the opinion of scientists, the proposed method has sparked widespread debate. Some scientists considered the standard too conservative because it was necessary to wait until the new method became widespread enough to be used in litigation; others, on the other hand, argued that any method could be made acceptable if the “*scientific community*” was limited; others stressed that the methodology may be common, but in this case, the results of its application may be wrong; after all, the criteria of “*general recognition*”, “*specific scientific field*” courts applied differently³⁸.

The *Frye* Standard gave way to a new standard. In 1993, in the case of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, two

36 Ward T. Explaining and trusting expert evidence: What is a ‘sufficiently reliable scientific basis’? *The International Journal of Evidence & Proof*. 2020. Vol. 24. № 3. P. 234. DOI: 10.1177/1365712720927622 (date accessed: 20.12.2020).

37 *Frye v. United States*. 293 Fed. 1013 (D. C. Cir. 1923). URL: <https://casetext.com/case/frye-v-united-states-7> (date accessed: 20.12.2020).

38 Giannelli P. C. The Admissibility of Novel Scientific Evidence: *Frye v. United States*, a Half-Century later. *Columbia Law Review*. 1980. Vol. 80. No. 6. Pp. 1997–1250. DOI: 10.2307/1122061 (date accessed: 20.12.2020).

children born with disabilities demanded compensation from the manufacturer of “Benedictine”, claiming that it was the drug (which their mother had taken during pregnancy to treat morning sickness) that caused their disability³⁹. After hearings of courts of First Instance and Appellate Instance, the Supreme Court decreed that formed the basis of Daubert Standard and contained the following requirements for assessing the veracity of the forensic report:

- 1) the court must determine whether the scientific theory or methodology has been tested. Referring to authoritative scientific resources, the court recognized that the feature of science is an empirical verification;
- 2) whether the theory or method has been expertly evaluated and made public (review and publication increase the likelihood of identifying deficiencies, so they are indirect evidence that the forensic report is confirmed by a reliable scientific methodology);
- 3) an important factor is the known or potential error rate of the method used;
- 4) an indicator of the reliability of the forensic reports is the presence and compliance with standards that control the operation of equipment;
- 5) an important factor remains the “general recognition” of the research methodology used by the expert. Although the Supreme Court rejected “general recognition” as the only criterion for the admissibility of the *Frye*

Standard, it recognized its relevance in assessing the reliability of scientific data. This factor can be an important indirect proof of the correctness of the research, which forms the basis of the forensic report.

Note: the new standard obliged first instance judges to verify the scientific validity of expert evidence. Judges, previously isolated from the scientific side of the testimony, now had to become acquainted with the scientific basis, expert methods and methodology. The Supreme Court has defined this new commitment as the role of “gatekeeper” to describe a judge’s actions. If the judge’s preliminary examination confirms the scientific veracity of the research, he “allows” the forensic report to be worked out by a jury for a decision in the case⁴⁰.

The next two court sentences supplemented the Daubert Standard. In the case of *General Electric Co. v Joiner*, the Supreme Court noted that the expert point of view should not follow from unfounded assumptions, extrapolation of scientific data to specific research objects with gaps between methodology and expert opinion⁴¹. In this way, the court placed the emphasis on the necessary interrelation between the general scientific principles and the results of particular expert research. Another important result of the case – the court cannot recognize evidence solely on the basis of the expert authority (on the principle of *ipse dixit* – from Latin “he said”, i.e., an authoritative opinion that does not require evidence)⁴².

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- 39 *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 US. 579 (1993). URL: <https://supreme.justia.com/cases/federal/us/509/579> (date accessed: 20.12.2020).
 - 40 Faigman D. L., Slobogin C., Monahan J. Gatekeeping Science: Using the Structure of Scientific Research to Distinguish Between Admissibility and Weight in Expert Testimony. *Northwestern University Law Review*. 2016. Vol. 110. No. 4. 44 p. URL: <https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1244&context=nulr> (date accessed: 20.12.2020).
 - 41 *General Electric Co. v Joiner*, 522 U. S. 136 (1997). URL: <https://supreme.justia.com/cases/federal/us/522/136> (date accessed: 20.12.2020).
 - 42 Edwards T. S., Jr., Edwards J. R. The Daubert expert standard: a primer for Florida judges and lawyers. *The Florida bar journal*. 2020. Vol. 94. No. 2. P. 8. URL: <https://www.floridabar.org/the-florida-bar-journal/the-daubert-expert-standard-a-primer-for-florida-judges-and-lawyers>

Considering the case *Kumho Tire Co. v. Carmichael*, the Supreme Court revoked a resolution of First and Appellate courts which found the expert's testimony inadmissible because the plaintiffs' expert based the testimony on his own "experience" rather than specific expertise⁴³. The Supreme Court held that the Rule 702 does not distinguish "scientific", "technical", or "another specific" expertise, as any knowledge can be used for expert testimony. The Court noted that engineering is a science-based discipline. Therefore, the Daubert Standard for determining admissibility can be applied to any expert testimony, including those based on technical knowledge, skills, and abilities.

The analyses of *Frye* and Daubert Standards lead to conclusions that their requirements are also consistent with the need to meet certain conditions and criteria for assessing the veracity of the forensic report: the use of general scientific principles and methods tested in practice and applied in specific research. A significant difference from the domestic approach in determining the reliability of the results of the examination is the requirement to indicate possible errors of the research, which subsequently significantly affected the revision of the general methodological principles of forensic examinations⁴⁴.

In England and Wales, the procedure of gathering and examining evidence is governed by *the Criminal Procedure Rules*⁴⁵. The analysis of Chapter 19 *Expert Evidence*, devoted to the conduct and verification of the forensic report, shows that some of rules

are directly aimed at assessing the veracity of the forensic report. Thus, according to sub-clause 19.3.3.d, at the request of the opposing party, the expert is obliged to provide a copy of the forensic report to verify "the record of any research, measurement, test or experiment on which the forensic report and thoughts are based, or conducted to obtain these conclusions; all means by which such research, measurements, tests or experiments have been carried out." Obviously, such verification is aimed at establishing the veracity of the expert research process. The norm of sub-clause 19.4 *Content of expert's report* contains requirements for the report as a procedural document indicating the competence of the expert, all researched objects and processed literature, explanation of all established facts and conclusions, and if the examination was conducted by several experts, who did not reach a consensus — to state the range of opinions and the reason for differences. It is quite obvious that these requirements are aimed at establishing the veracity and validity of the results of the examination. Problems with assessing the scientific veracity of expert opinions and concerns about the lack of criteria for such assessment have contributed to the introduction of the Daubert Standard in the jurisprudence of England and Wales.

The House of Commons Science and Technology Committee of the UK Parliament held a meeting on "*Forensic Examination in Court*", which ruled that the lack of an agreed protocol on the suitability of scientific methods for their recognition in court is completely unacceptable. It was

(date accessed: 20.12.2020).

43 *Kumho Tire Co. v. Carmichael*, 526 U. S. 137 (1999). URL: <https://supreme.justia.com/cases/federal/us/526/137> (date accessed: 20.12.2020).

44 Stern H. S., Cuellar M., Kaye D. H. Reliability and Validity of Forensic Science Evidence. *Significance*. Apr. 2019. Vol. 16. No. 2. P. 21–24. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3387399 (date accessed: 20.12.2020).

45 *The Criminal Procedure Rules 2020. UK Statutory Instruments*. 2020. № 759 (L. 19). URL: <https://www.legislation.gov.uk/uksi/2020/759/contents/made> (date accessed: 20.12.2020).

suggested that an objective, clear test be developed on the example of the Daubert Standard to determine whether a theory or methodology is sufficiently reliable and evidence-based to be recognized in court⁴⁶. And over time, courts have taken a stricter approach to evaluate expert evidence, and in some cases have even insisted on statistical evaluation of certain types of forensic evidence if provided by an expert⁴⁷.

Combining the conditions, epistemological and procedural criteria for the veracity of the forensic report is the foundation on which to form a certain standard of proof of compliance with the conclusions of the expert's objective reality. The domestic procedural literature discusses the possibility of using standards of evidence to objectify the evaluation of evidence. V. V. Vapniarchuk notes that the standards of proof are certain evaluation criteria, conditional model, benchmark, the optimal level of requirements, which indicates the sufficiency of knowledge of the subject of proof both in the objective (a certain set of evidence) and in the subjective (certain level of conviction) aspect for making an appropriate procedural decision⁴⁸. As for the forensic report, such a standard has not been proposed so far, so we will try to fill this gap.

We consider that the standard “*beyond reasonable doubt*” is quite suitable for deter-

mining the reliability of the forensic report which, in fact, corresponds to the legally regulated method of free evaluation of evidence by internal conviction⁴⁹.

This Standard is a new legal phenomenon for criminal procedural legislation of Ukraine. In accordance with Art. 17 § 2 of the Criminal Procedural Code of Ukraine “*no one is obliged to prove his innocence in committing a criminal offense and must be acquitted if the prosecution does not prove the guilt of a person beyond a reasonable doubt.*” The legislature does not define the concept of this standard of proof and applies it solely to the guilt of the accused, placing the burden of proof on the prosecution.

Proving a guilt of a person “*beyond reasonable doubt*”, as American scientists note, is a stage of the process which after a full, comprehensive and impartial examination and evaluation of all evidence gathered in criminal proceedings, is still incomplete and does not completely convince judges and jurors in proof (truthfulness) of the accusation in the criminal proceeding⁵⁰. The considered standard deepens the internal conviction of the subject of proof in authenticity of proofs and sufficiency of their set for acceptance of the procedural decision by which the person is found guilty or not guilty of commission of a criminal offense⁵¹.

46 House of Commons. Science and Technology Committee. Forensic Science on Trial. Seventh Report of Session 2004–05. Published on 29 March 2005. P. 77. URL: <http://www.publications.parliament.uk/pa/cm200405/cmselect/cmsctech/96/96i.pdf> (date accessed: 20.12.2020).

47 Schafer B., Aitken C. G. G., Mavridis D. Daubert in the UK – Second order evidence between courts and commissions. URL: <http://www.maths.ed.ac.uk/~cgga/Cutting%20the%20Daubert%20knot.doc> (date accessed: 20.12.2020).

48 Вапнярчук В. В. Теоретичні основи кримінального процесуального доказування : дис. ... д-ра юрид. наук. Харків, 2018. С. 153.

49 Кримінальний процес : підручник С. 154.

50 Bergman P., Berman S. J. The Criminal Law Handbook: Know Your Rights, Survive the System. 11th edition. Printed in the U. S. A., 2009. P. 341.

51 Drozdov O., Hryniuk V., Kovalchuk S., Korytko L., & Kret G. The standard of proof “*beyond a reasonable doubt*” in criminal proceedings of Ukraine in the context of the ECHR case-law. *Ama-zonia Investiga*. 2021. Vol. 10. Is. 46. P. 281–289. DOI: 10.34069/AI/2021.46.10.28 (date accessed: 20.12.2020).

European Court of Human Rights considers the standard of proof “*beyond reasonable doubt*”, on the one hand, as the duty of the prosecution to prove the guilt of the accused, and on the other — as the duty of the court to pass a conviction only when the guilt of the accused beyond a reasonable doubt⁵². In particular, in the case of *Sevtaп Veznedaroglu v. Turkey*, it is stated that the evidence reflects the maximum standard that applies to issues in the determination of criminal responsibility. No person shall be deprived of his liberty or subjected to any other punishment by a court decision unless the guilt of such person has been proved beyond a reasonable doubt⁵³.

Reasonable doubt must be substantiated by the evidence gathered. If the forensic reports are substantiated scientifically-methodically and logically, if they do not contradict the rest of the collected and evaluated evidence, then there is no objective reason to doubt the veracity of the forensic report. The standard of proof beyond a reasonable doubt is the basis for the formation of the internal conviction of the subject of proof to establish the veracity of the forensic report. This standard means that all doubts about the conditions and grounds for forming the forensic report, except those considered reasonable, are beyond common sense, e.g., when assessing the veracity of the report, the parties and the court must be sure “*beyond reasonable doubt*” that the established fact is correct. Together with all the evidence gathered, the forensic report makes it possible to make the necessary procedural decision in the criminal proceedings.

Conclusions

In view of the above, we can formulate the following definition. The standard of veracity of the forensic report means that the conditions of relevance and admissibility of the report are met, the objects submitted for examination are of good quality, the expert conclusions are substantiated by general scientific and methodological provisions and based on them results of specific expert research, logically substantiated, consistent with the rest of the evidence of the criminal proceedings and found to correspond to beyond a reasonable doubt the factual circumstances of the offense.

Стандарт достовірності висновку експерта у кримінальному процесі Михайло Щербаковський

Виокремлено процесуальні (належність та допустимість) і гносеологічні (доброякісність об'єктів, правильність вихідних даних, застосована затверджена методика дослідження) умови й критерії (гносеологічні — науково-методичне та логічне обґрунтування умовиводів експерта, процесуальні — узгодженість з іншими матеріалами провадження), які визначають достовірність висновку експерта.

Метою статті є аналізування думок науковців щодо достовірності доказів загалом і висновку експерта зокрема; з'ясування обставин, що передують висновку експерта й зумовлюють його достовірність; виокремлення гносеологічних і процесуальних критеріїв цієї характеристики та формулювання стандарту, згідно з яким достовірність експертного висновку можна визначити за результатами проведеного дослідження.

52 Gunn T. J. Limitations Clauses, Evidence, and the Burden of Proof in the European Court of Human Rights. *Religion & Human Rights*. 2020. Vol. 15. Is. 1–2. P. 192–206. DOI: 10.1163/18710328-BJA10007 (date accessed: 20.12.2021).

53 *Sevtaп Veznedaroglu v. Turkey* (Севтап Везнедароглу против Турции) : решение Европейского суда по правам человека от 11.04.2000 г. URL: https://www.srji.org/resources/search/?f_1_195053735=&set_filter=y&PAGEN_1=1&SIZEN_1=20 (date accessed: 20.12.2021).

Науково-методичне обґрунтування містить загальне й конкретне обґрунтування результатів дослідження поданих на експертизу об'єктів. Логічним обґрунтуванням є аргументування проміжних і остаточних висновків експерта. Критерій процесуальної достовірності висновку експерта полягає в його несуперечності, узгодженості з рештою доказів. Для визначення відповідності висновку експерта об'єктивній дійсності рекомендовано застосовувати стандарт доказування «поза розумним сумнівом».

Стандарт достовірності висновку експерта означає, що умови належності й допустимості висновку дотримано; на експертизу подано доброякісні об'єкти; умовиводи експерта обґрунтовано загальними науково-методичними положеннями й заснованими на них результатами конкретного експертного дослідження, логічно аргументовано, узгоджуються з рештою доказів кримінального провадження та їх визнано відповідними поза розумним сумнівом фактичним обставинам правопорушення.

Ключові слова: висновок експерта; достовірність; допустимість; належність; обґрунтованість; стандарт достовірності.

Стандарт достоверности заключения эксперта в уголовном процессе

Михаил Щербаковский

Выделены процессуальные (относимость и допустимость) и гносеологические (доброкачественность объектов, правильность исходных данных, использована утверждённая методика исследования) условия и критерии (гносеологические — научно-методическое и логическое обоснование умозаключений эксперта, процессуальные — согласованность с другими материалами производства), определяющие достоверность заключения эксперта.

Целью статьи является анализ мнений учёных относительно достоверности доказательств вообще и заключения эксперта в частности; определение обстоятельств, предшествующих заключению эксперта и обуславливающих его достоверность; выделение гносеологических и процессуальных критериев этого свойства и формулирование стандарта, согласно которому достоверность экспертного заключения можно установить по результатам проведённого исследования.

Научно-методическое обоснование включает общее и конкретное обоснование результатов исследования представленных на экспертизу объектов. Логическим обоснованием является аргументация промежуточных и окончательных выводов эксперта. Критерий процессуальной достоверности заключения эксперта состоит в его непротиворечивости, согласованности с остальными доказательствами. Для определения соответствия заключения эксперта объективной действительности рекомендовано применять стандарт доказывания «вне разумного сомнения».

Стандарт достоверности заключения эксперта означает, что условия относимости и допустимости заключения соблюдены; на экспертизу представлены доброкачественные объекты; умозаключения эксперта обоснованы общими научно-методическими положениями и основанными на них результатами конкретного экспертного исследования, логически аргументированы, согласуются с другими доказательствами уголовного производства и признаны соответствующими вне разумного сомнения фактическим обстоятельствам правонарушения.

Ключевые слова: заключение эксперта; достоверность; допустимость; относимость; обоснованность; стандарт достоверности.

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Declaration of Competing Interest

The author declares that he has no conflict of interest.

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