

The probative Value of scientific Expert Evidence and Its Role in Shaping the Criminal Judge's Conviction

BOUZOUINA Mohamed Yassine

¹ University of Tlemcen (ALGERIA), Bouzouina13000@hotmail.com

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Abstract:

While the judge holds the highest authority and expertise in legal matters, legislation allows him to consult specialists when scientific or technical issues arise within his jurisdiction. Scientific expertise plays a crucial role in criminal evidence by aiding the uncovering of truth, supporting the judicial police, and assisting in establishing the material or moral responsibility of the accused. Despite its evidential weight, the Algerian legislator maintains that such expertise remains subject to the judge's discretionary authority, although in practice it is often guided by expert reports.

Keywords: Scientific expertise; criminal evidence; probative value of expertise; judicial discretion.

1. INTRODUCTION

The judiciary has always been a fundamental pillar of society, serving as a vital institution entrusted with the application of the law. While its core purpose remains constant—upholding justice through the enforcement of legal provisions—it inevitably evolves over time in response to the transformations of social, economic, political, and legal life.

The rapid pace of modern developments in all spheres of life has given rise to new types of disputes and legal issues, compelling judges to adapt in order to keep pace with societal changes and to fulfill their noble mission of delivering justice.

The study of the probative value of scientific expertise seeks to assess the weight and credibility of modern forensic evidence, ranking it according to its evidentiary

strength and its ability to reflect truth and reality, as well as its influence on the judge's conviction when issuing a verdict of acquittal or conviction¹.

In contemporary life, the diversity of disciplines and the breadth of specialized knowledge have made it impossible for judges to master every scientific and technical field. Their primary duty remains to be well-versed in legal texts—ever-changing and numerous—while keeping abreast of judicial precedents. Consequently, practical necessity has made it imperative for judges to rely on judicial experts and specialists in purely technical and scientific matters, to clarify complex points on which the resolution of a case may depend.

The pursuit and admissibility of scientific evidence in criminal proceedings present complex procedural challenges. In the quest for truth, two opposing interests inevitably arise: the public interest in uncovering the facts of the crime and apprehending the offender who has threatened public security and order, and the defendant's interest in safeguarding their rights and dignity throughout the evidence-gathering process. Achieving a proper balance between these considerations is fundamental to the integrity of justice.

Within this framework, the law of criminal evidence is guided by two core principles: the principle of freedom of proof and the presumption of innocence. In the Algerian Code of Criminal Procedure, the legislature regulates the role of scientific expertise in criminal matters under Articles 143 to 156 of Ordinance No. 66-155, which apply to the preliminary investigation stage. For the trial phase, Article 219 provides that the same provisions shall apply².

Given the significant role that scientific expertise plays in criminal evidence, the present study raises the following central question: To what extent does scientific expertise, as a means of criminal proof, influence the personal conviction of the criminal judge?

To address this question, and in line with the structure of the research, the descriptive-analytical method has been adopted, in accordance with the nature and objectives of the study. This approach enables the integration of modern scientific and technical aspects with the legal dimensions of the issue, with the aim of establishing a standard that can be relied upon based on the results of employing such methods.

In order to examine more closely the probative value of scientific expertise and its contribution to shaping the judge's conviction, the study is divided into two main parts: the probative force of the expert report (Section One) and the extent to which scientific

¹ Baaziz, Ahmed, *Scientific Expertise and Its Role in Criminal Evidence*, PhD Thesis, Private Law, Faculty of Law, University of Abu Bakr Belkaid, Tlemcen, 2018/2019, p. 630.

² Ordinance No. 66/155 dated 8 June 1966, containing the Code of Criminal Procedure, Algerian Official Gazette, No. 49, 11 June 1966, as amended and supplemented.

expertise contributes to forming the personal conviction of the criminal judge (Section Two).

2. The Probative Value of the Scientific Expert Report

Legal scholarship has long been divided over the admissibility of scientific methods in criminal proceedings, a debate rooted in the tension between society's right to security and the individual's right to personal freedom. At its core, this tension reflects the inherent conflict between the investigator and the suspect, which in reality is a broader struggle between society and the offender, encompassing two distinct and competing interests. From an abstract perspective, it is nearly impossible to predict which of these interests should prevail¹.

The discretionary power of the criminal judge to assess scientific expertise, as one of the means of proof, has been the subject of considerable scholarly controversy. Jurists have reached no consensus on the matter, each adopting a position supported by arguments they deem persuasive. This intense doctrinal debate has also been mirrored in judicial practice.

2.1 First Subtitle: Scholarly Views on the Probative Value of the Scientific Expert Report

Legal scholars have expressed divergent opinions regarding the nature of scientific expertise and the assessment of its importance in criminal proof. Their approaches have varied considerably, and an examination of several legal writings reveals that the doctrine has developed a number of theories to define the nature of expertise, each shaped by the scholar's own understanding and evaluation. These differing conceptions have, in turn, influenced their views on its evidentiary value in criminal proceedings and its impact on the judge's conviction, resulting in opinions that range widely—sometimes to the point of outright contradiction².

To clarify the substance of these positions, the discussion will proceed in three stages: first, the arguments advanced by those who affirm the probative value of the scientific expert report; second, the views of those who deny such probative value; and finally, a review of the moderate, reconciliatory approach.

First: The Position of Those Who Affirm the Probative Value of the Scientific Expert Report

¹Kherani, Fouzi, *Scientific Evidence and Its Role in Criminal Proof*, Master's Thesis, Criminal Law, Faculty of Law and Political Science, Kasdi Merbah University, Algeria, 2011-2012, p. 163.

² Abdelkafi, Wriashi, "Evidentiary Value of Medical Reports before the Criminal Judge," *Message of Defense Journal*, No. 7, Bar Association of Nador, Morocco, June 2007, p. 30.

Proponents of this view argue that the criminal judge should be bound by the conclusions reached by the expert in their report. Among them are the thinkers of the Positivist School, who considered the expert to be the “judge of fact.” One of its most prominent figures, Enrico Ferri, stated in his work *Sociology*: “We demand that expert opinions be binding on the judge, for the expert is more competent than the judge in technical matters. This is why the Positivists strongly called for replacing lay jurors with scientific jurors.”

This approach is consistent with a decision of the Court of Cassation, which held: “What the expert determines is not testimony, but rather a form of judgment. The judge consults the expert to obtain knowledge beyond his own. Since the expert’s conclusions result from technical and scientific research that lies outside the judge’s competence for examination or critique, they constitute binding proof for the judge. This does not mean, however, that the judge must adopt them in all circumstances; rather, it means that he may not render a judgment contrary to them based solely on personal opinion or intuition. If the judge has reasonable grounds for doubt, he may refer the matter to a technical committee to investigate and clarify the truth in order to dispel any suspicion.”¹

Some scholars liken scientific expertise to a mirror that illuminates the truth, arguing that justice cannot be complete without it. Scientific evidence, they contend, is free from any influence of authority, incitement, coercion, or force in uncovering the truth. Sound reasoning, they argue, cannot accept the release of a dangerous individual merely because the evidence was obtained through methods that, although socially objectionable, reveal the reality of the matter. To claim otherwise, in their view, would lead to consequences far more serious than the objection to the evidence itself. In practice, the use of scientific evidence is generally limited to what is necessary for uncovering the truth, without infringing upon human rights².

Furthermore, the advances in science and technology across various fields have equipped the criminal justice system with highly reliable methods of proof, grounded in solid scientific principles and capable of producing precise results. This has led some to advocate removing scientific evidence from the scope of the judge’s discretionary power and conferring upon it binding authority. In such a system, scientific evidence would become the prevailing standard, and the expert would take on the decisive and central role in the judicial process—effectively replacing the judge’s personal conviction with the expert’s conclusions³.

¹ Khroufa, Ghania, *The Authority of the Criminal Judge in Evaluating Expert Reports*, Master’s Thesis, Faculty of Law and Political Science, Mentouri University, Constantine, Algeria, 2008-2009, p. 121.

² Metwally, Taha Ahmed, *Scientific Evidence and Its Impact on Criminal Proof*, 1st edition, Police Press, Egypt, 2008, p. 102.

³ Khroufa, Ghania, *ibid.*, p. 122.

This position is supported by the majority of legal systems, which advocate the use of scientific evidence in uncovering crimes in a manner consistent with the progress of modern science. This is particularly justified by the fact that offenders no longer limit themselves to committing crimes through traditional means, but have themselves resorted to modern and sophisticated methods. It is therefore only logical to confront them with the same tools—indeed, with technologies and techniques that surpass those they employ¹.

Second: The Position of Those Who Reject the Probative Value of the Scientific Expert Report

In contrast to the first view, a considerable body of legal scholars—and those who follow them in Algerian legal discourse—reject the binding probative value of scientific expertise. Their position is grounded in established judicial practice, which holds that the judge is the “expert of experts,” and in the longstanding principle embedded in many legal systems that the expert’s opinion does not bind the court².

Proponents of this view argue that granting binding authority to scientific expertise would effectively diminish the judge’s role in the process of proof, leaving them with no choice but to submit to the expert’s opinion. The jurist Bouzat expressed this sentiment by stating that “the judge can no longer add to his pen except the policeman’s baton or the scientist’s wisdom”.³

They further contend that such evidence should not be relied upon in the process of proof, especially given that science has not yet reached definitive results in many of these methods to provide the judge with absolute certainty. Moreover, they argue that scientific techniques may pose significant risks to human life in various forms. Considering the immense powers and resources of the state, represented by the executive authority, and the absence of full guarantees to protect the individual—viewed as the weaker party—these methods disrupt the balance of the principle of equality of arms and risk a regression toward a police-state model⁴.

It is a firmly established principle that the judge has full discretion in assessing the probative value of the evidence presented and debated in the case, including expert testimony. The judge is, in essence, the highest expert in all matters they are competent to decide themselves. There is, however, a fundamental distinction between the role of the judge and that of the expert: the judge adjudicates the dispute before them, delivering

¹Kherani, Fouzi, *ibid.*, p. 164.

² Abdelhamid, Al-Shawarbi, *Criminal Evidence in Light of Jurisprudence and Case Law*, Dar Al-Jam‘a Al-Jadida, Egypt, 2005, p. 20.

³ Metwally, Taha Ahmed, *ibid.*, p. 102.

⁴ Kherani, Fouzi, *ibid.*, p. 164.

a ruling on a punishable act, after considering all the evidence in the case, accepting what they deem appropriate and discarding what does not convince them.

By contrast, the expert's role—although somewhat similar in nature to that of the judge—consists in preparing a report that reflects a personal opinion on the facts referred to them. This opinion does not carry the authority of a judicial ruling; rather, it is a technical consultation that the judge may accept if convinced by its conclusions, or reject if not persuaded¹.

Given that the criminal judge is the master of the case and the “expert of experts” from a technical standpoint, all matters ultimately fall under their authority. The work of experts is therefore subject to the judge's assessment: they may accept it or disregard it, in line with their personal conviction derived from the case file. As criminal jurisprudence often puts it, “the judge may reach certainty where the expert does not².”

A segment of legal scholarship holds that the expert's opinion does not bind the court, as the judge is considered the highest expert in the case. The court is thus under no obligation to adopt the expert's conclusions and retains full discretion in this regard. It may even rule in favor of an opinion contrary to that of the expert if it is convinced that the opposing view is correct, or if it finds that the expert's conclusions are inaccurate, inconsistent with reality, or in contradiction with the documents submitted by the parties. This right to disregard the expert's report applies even in matters that the court may not fully grasp based solely on its own knowledge, since expert reports are not binding but are intended merely to assist the court in ascertaining the truth³.

The court is not obliged to state the reasons that led it to disregard the judicial expert's report; it suffices for it to declare that it does not adopt the report because it conflicts with the truth as reflected in the court's own conviction, provided that such conviction is based on acceptable grounds. The court is under no obligation to accept the outcome of evidentiary measures it has ordered⁴.

Hence, it has become necessary to establish effective legal oversight to ascertain the seriousness of the matter. In this context, the judge exercises discretionary authority with respect to the expert's opinion. The substance of an expert report is merely a specialized opinion relating to a piece of evidence; the expert's report clarifies this evidence, details its elements, and then presents his or her technical perspective on its potential probative value. However, one might ask: how can the court resort to expertise in order to clarify a technical or specialized matter of which it has no knowledge, and yet still retain the

¹ Khroufa, Ghania, *ibid.*, p. 123.

² Khroufa, Ghania, *ibid.*, p. 123.

³ Moatasem Khalid Mahmoud Hayf, *Judicial Expertise in Civil Cases*, 1st edition, Dar Al-Thaqafa for Publishing and Distribution, Amman, Jordan, 2014, p. 154.

⁴ Hilali, Ahmed Abdullah, *General Theory of Criminal Evidence: A Comparative Study between Latin, Anglo-Saxon, and Islamic Procedural Systems*, Dar Al-Nahda Al-Arabiya, Egypt, 2011, p. 103.

discretion to assess the expert's opinion—especially when the court itself, from the outset, acknowledged that the expert possesses knowledge, competence, and expertise in the disputed matter that the court does not have, which is precisely why the technical expertise was ordered and the expert appointed to dispel the ambiguity surrounding the issue?

It may be said that the court's appointment of a judicial expert to clarify a technical or specialized matter and to provide an opinion on it does not deprive the court of its authority to assess the facts of the case and the evidence presented therein. If the judicial expert expresses an opinion, such opinion does not bind the court, for the court alone holds the power and jurisdiction to decide the dispute, not the expert. The expert's role is limited to guiding the court and removing any ambiguity surrounding the matter under expertise. To say otherwise would be to make the expert a judge and to turn the expert's opinion into a judicial ruling, which contradicts the most basic principles of law.

Accordingly, the principle that “the judge is the expert of experts” grants the court the discretion to adopt the expert's opinion and rely on it to decide the case, as well as the authority to reject it entirely or partially¹.

Therefore, the expert's findings regarding the establishment of a fact represent a purely technical perspective, which must be coupled with a legal perspective in order for the expert's opinion to acquire effective probative value. The judge's authority in assessing the weight of the expert's opinion lies in exercising legal oversight over the scientific or technical view presented by the expert.

Third: The Reconciliatory Approach

In an attempt to reconcile the two opposing views mentioned earlier, a group of legal scholars has argued for the necessity of distinguishing between two highly significant issues: first, the conclusive scientific value of the evidence, and second, the circumstances and conditions in which such evidence was obtained².

According to this view, in order for the judge to be bound by what is stated in the scientific expert report, they must refrain from addressing the first matter, as it lies beyond their capacity—otherwise, there would have been no need to seek the assistance of a technical expert in the first place. The value of the evidence is reinforced by the fact that it is based on precise scientific grounds, leaving no room for the judge's discretion to question it, as it constitutes established scientific facts.

¹ Moatasem Khalid Mahmoud Hayf, *Judicial Expertise in Civil Cases*, 1st edition, Dar Al-Thaqafa for Publishing and Distribution, Amman, Jordan, 2014, p. 154.

² Khroufa, Ghania, *ibid.*, p. 125.

Once the judge ascertains the certainty and conclusiveness of the scientific evidence, they may go further by examining the evidence in light of the circumstances and conditions under which it was obtained. These circumstances fall within the scope of the judge's subjective assessment, as they are inherently judicial in nature. By exercising their discretionary authority, the judge may even set aside such evidence—despite its scientific conclusiveness—if they find that its existence does not logically align with the facts and circumstances of the case¹.

Even though the findings of expert reports are not binding on the judge, when it comes to technical matters beyond their area of expertise, they require support to reinforce their conviction regarding the conclusions reached—such as in medical expertise, which is usually conducted by specialists in the same field as the physician under investigation or accusation².

Moreover, the judge's training in the legal field, and the impossibility of mastering other domains outside their specialization, make recourse to the opinion of qualified experts inevitable. Nevertheless, the expert's report remains merely an opinion on a technical matter, left entirely to the judge's discretion in deciding the case.

Although this approach seeks to reconcile and strike a balance between the two preceding views, it is not without criticism. The main objection lies in the judge's reassertion of discretionary authority—not by virtue of disputing the probative force that scientific evidence has attained and confirmed from a purely scientific standpoint, but rather by relying on their ability to understand and evaluate the circumstances and conditions surrounding such evidence. This allows the judge to disregard it, despite its scientific conclusiveness.

It appears that proponents of this view lean toward the position adopted by the second school of thought, as they attach little weight to the conclusive and persuasive nature of scientific evidence. Their requirement, as a preliminary condition, that the evidence possess conclusive scientific value serves merely as an acknowledgment of its existence—nothing more³.

In light of the foregoing, it can be said that the proponents of this approach tend, in essence, to adopt the second view, despite their attempt to formulate an intermediate position between the two previous opinions regarding expert reports before the criminal judge.

¹ Hilali, Ahmed Abdullah, *General Theory of Criminal Evidence: A Comparative Study between Latin, Anglo-Saxon, and Islamic Procedural Systems*, Dar Al-Nahda Al-Arabiya, Egypt, 2011, p. 103.

² Fadila Malhaq, "Criminal Liability of the Physician for Medical Prescriptions under Criminal Law," *Judges' Bulletin*, No. 58, Research Directorate, Ministry of Justice, Algeria, 2003, p. 137.

³ Khroufa, Ghania, *ibid.*, p. 126.

From my perspective, and in line with scientific advancements, I believe it is essential for the judge to allow room for scientific expertise and to rely on it as a modern evidentiary tool founded on solid objective grounds. This stance reflects support for the first school of thought, which advocates that the criminal judge must adhere to the results of scientific expertise, at least with respect to certain types, thereby removing the scientific evidence derived from a specific technical examination from the judge's discretionary power.

If the judge harbors doubts about the accuracy of the conclusion reached by the first expert, he may appoint another expert to address the matter. Should the two experts arrive at conflicting conclusions that cannot be reconciled, the judge must then appoint a third expert to resolve the issue. When two of the three opinions concur, the judge should adopt the result on which they agree, as it represents the most probable and scientifically certain outcome.

However, it may be objected that removing evidence derived from expert reports from the judge's discretionary authority constitutes an exception to a principle that lies at the core of the theory of evidence and characterizes the modern era.

Such an objection is unfounded, given that the legislator has, in fact, introduced certain exceptions that limit the full exercise of this discretion. For instance, certain official reports are vested with a special evidentiary force, such that they serve as proof of their contents until rebutted—either by presenting counter-evidence or by initiating proceedings for forgery. This is an undeniable legal reality. From this standpoint, it has become necessary to recognize a special probative value for scientific expert reports¹.

It would be illogical to deprive justice of the capabilities offered by science. To withhold such tools from the judicial process creates an imbalance between crime and justice, particularly given that scientific progress is ever-evolving and its boundaries cannot be foreseen. Each day reveals new means capable of assisting the administration of justice².

2.2 Second Subtitle : The Judiciary's View on the Evidentiary Value of Scientific Expert Reports

As a result of the lack of consensus in legal doctrine regarding the probative value of expert reports, it became necessary to turn to judicial practice in order to determine the rulings established on this matter.

Judicial decisions and precedents have consistently held that a judgment is flawed if the court fails to respond to a request for the appointment of an expert, as such failure

¹Khroufa, Ghania, *ibid.*, p. 127.

² Kherani, Fouzi, *ibid.*, p. 165.

constitutes both a violation of the right of defense and a deficiency in reasoning. This is considered a consequence of the court's omission to address substantive defenses in general¹.

The Court of Cassation has adopted an approach grounded in the principle of *personal conviction*, under which the criminal judge is free to resort to any lawful means or evidence that may assist in forming his or her belief, and is likewise free to weigh and assess such evidence at its proper value. No single piece of evidence is to be afforded greater probative force than others by virtue of judicial rulings, leaving the matter to the judge's discretionary power, derived from his or her inner conviction and conscience.

Accordingly, the judiciary has thus aligned the treatment of all means of proof, subjecting them all—including expert reports—to the assessment of trial judges, without granting expert reports any special probative force. This principle is reflected in the jurisprudence of the Supreme Court, which has affirmed that expert opinions, like any other means of proof, are subject to the discretion of the trial judges. An expert report does not bind them; rather, it is open to discussion and examination, and its weight is determined according to their assessment and conviction².

Furthermore, the Algerian Supreme Court has reaffirmed, in other rulings, the principle of judicial freedom in evaluating expert evidence, stating that expert testimony is an optional method of proof, equal in value to other evidentiary methods and enjoying no special privilege. An expert report is merely one evidentiary element presented for discussion by the parties and for evaluation by the judges adjudicating the case.

It is well established in judicial practice that the assessment of scientific expertise ultimately depends on the nature of the technical matter at issue and on the characteristics of the expertise itself, which is nothing more than the expert's personal opinion on certain limited aspects—matters that remain entirely subject to the judge's discretion.

Expert evidence does not differ from other means of proof, and the provisions of the Code of Civil and Administrative Procedure confirm this same approach: the judge is not bound by the expert's opinion, even when operating within a restricted evidentiary system or one governed by legal proofs.

However, it is noteworthy that the interpretative interventions of the Algerian Supreme Court emphasize the necessity for judges to resort to the work of experts in matters requiring the involvement of specialists and professionals—both to establish the occurrence of the offence and to attribute it to the perpetrator³.

¹ Fathi, Mohamed Anwar Izzat, *Rules for Appointing Experts in Criminal, Civil, Economic, and Technological Matters: A Legal, Judicial, and Practical Study*, 1st edition, Dar Al-Nahda Al-Arabiya, Egypt, 2010, p. 402.

² Khroufa, Ghania, *ibid.*, p. 128.

³ Khroufa, Ghania, *ibid.*, p. 128.

3. The Extent of Scientific Expertise's Contribution to the Formation of the Algerian Judge's Personal Conviction

As previously concluded, scientific expertise is theoretically equal in its legal value to other means of criminal proof, in accordance with the principle of the criminal judge's personal conviction. Under this principle, the judge has complete freedom to adopt any piece of evidence or means of proof that satisfies his conscience and to disregard any others, without being subject to the oversight of the Court of Cassation.

Moreover, Article 212 of the Algerian Code of Criminal Procedure has granted the criminal judge wide discretion to rely on all means that assist in forming his personal conviction, regardless of their probative strength or conclusiveness. In practice, however, the high evidentiary value of scientific evidence—characterized by precision, objectivity, and the provision of results of exceptional accuracy and certainty through advanced scientific techniques—has led to a situation in which the very concept of the judge's personal conviction is at risk of erosion. This is particularly true with the advancement of science and medicine, which has imposed scientific facts and findings that are virtually indisputable. As a result, the criminal judge's freedom to form his own subjective conviction has been, to some extent, reduced—or even eliminated. The presence of conclusive scientific evidence, such as DNA fingerprinting, eliminates any margin of doubt that could help the accused prove their innocence, as it strongly influences the judge toward conviction. Such evidence is highly reliable, making it readily accepted in court without the judge needing to engage in a deep mental search for the truth. For this reason, some positivist scholars argue that personal judicial conviction has no place when there are definitive scientific presumptions, even claiming that the expert is “more of a judge” than the judge himself—while the judge rules on the law, the expert rules on the facts¹.

To address the extent of the influence of scientific evidence on the formation of the criminal judge's personal conviction—being the subject of our discussion in this section—I have deemed it appropriate to begin by examining the importance of scientific expertise and its impact on the conviction of the authority responsible for prosecution. This will be followed by an analysis of the perceptions such evidence may impose at the stage of the judge's personal conviction during the investigation, culminating ultimately in identifying the optimal scope for exercising the personal conviction of the criminal court judge, and the extent to which scientific expertise practically shapes and directs that conviction at the judgment stage.

¹Ahmed Habib Al-Sammak, *The System of Evidence in Islamic Law and Positive Law*, Journal of Law, No. 2, Kuwait, 1997, p. 147.

3.1 First Subtitle: Scientific Expertise and Its Influence on the Formation of the Prosecution's Conviction

Since the burden of proof rests upon the Public Prosecution as the authority of accusation, it often exerts considerable effort in seeking evidence capable of establishing the occurrence of the crime and attributing it to the accused. However, before searching for an effective means by which it may influence the personal conviction of the investigative and judicial authorities—and thereby support its submissions—the Prosecution must, as a matter of priority, first establish its own conviction in order to determine the appropriate course of action in respect of the public action. To this end, it resorts to all the legal means granted to it by the legislator, including the engagement of expert witnesses, such as forensic physicians, in matters of a purely medical nature. This procedure frequently plays a decisive role in the conduct of criminal proceedings, as the Prosecution often finds itself in the position of awaiting the forensic medical report before taking any action regarding the fate of the case.

Criminal prosecution is grounded in two fundamental principles: **the legality of prosecution** and **the expediency of prosecution**. Within this framework, the expert's scientific report may play a decisive role, particularly in relation to the principle of expediency, as it can directly determine the legal characterization of the offence.

For example, in cases of intentional assault and battery, should the forensic medical report conclude that there is no incapacity and no other aggravating circumstance, the Public Prosecution is effectively compelled to refer the case to the misdemeanors division, with its only recourse to challenge the report being through the commissioning of another medical examination.

Similarly, the forensic report may find that, although the injuries sustained by the victim did not cause substantial incapacity, their nature suggests they were inflicted with a sharp weapon. On that basis alone, the offence would be classified as a misdemeanor, as the use or mere possession of a weapon is, in itself, sufficient to elevate the classification of the offence to a misdemeanor regardless of the duration of incapacity—even where the weapon was not recovered at the scene or the accused denied its use¹.

While a scientific expert report plays an important role in influencing the prosecuting authority—sometimes even determining the legal characterization of the offense—this influence becomes more significant in certain cases, to the point of persuading the Public Prosecutor to take a decision to dismiss the case, thereby putting an end to the proceedings. This is particularly true in sexual offenses, especially the crime of rape, where the law requires proof of penetration into the natural place of intercourse,

¹ Lazizi, Mohamed, "Forensic Medicine and Its Role in Judicial Reform," *Al-Talib Al-Qadi Journal*, Trial Issue, Higher School of Magistracy, Algeria, 2005, p. 16.

in addition to establishing that the act was committed without the victim's consent. In such cases, if the accused denies the charge or is not caught in flagrante delicto, it becomes impossible to establish these facts without resorting to forensic medical expertise.

Such expertise may control the course of public action, whether by initiating or dismissing it. For example, if the expert report confirms that there is no evidence of penetration whatsoever, nor any signs of violence or coercion, the Public Prosecutor will undoubtedly decide, based on the forensic medical report, to close the case. Even if the file is referred to an investigating or trial authority, the impact of the scientific expertise extends to these authorities as well, meaning the case will likely have the same outcome—either an order of non-prosecution or an acquittal.

Nevertheless, while the scientific expert report plays a significant role in shaping the conviction of the prosecuting authority when deciding the appropriate course of action, this role remains limited when compared to the influence that scientific expert evidence can have on the judge's personal conviction during both the investigation and trial phases.

3.2 Second Subtitle: The Influence of Scientific Expertise on the Personal Conviction of Investigative Authorities

As previously noted, the expert's work during judicial investigation is carried out under the supervision of the investigating judge, as one of the safeguards afforded to the accused. While it may be conducted in the absence of the accused, it is nonetheless undertaken with the knowledge and under the oversight of a judicial officer of investigation. Naturally, such oversight remains merely procedural in nature; it is not permissible to interfere in the technical tasks performed by the expert. Instead, the expert's mission should be facilitated by assisting in identifying the location of the investigation and providing the necessary objective conditions, without allowing any influence over the expert or his work. Notably, the order commissioning the expertise must clearly define the experts' mandate, which may only concern the examination of technical matters¹.

To address the extent of the influence of scientific expertise on investigative authorities, one must examine this matter within the framework of the principle of the investigating judge's personal conviction, previously mentioned. The investigating judge is not influenced by any form of evidence except in the process of forming his personal conviction—something that occurs only when issuing orders to dispose of the case file.

¹ Jamal Sarhan, Limits and Constraints of the Personal Conviction Principle of the Criminal Judge, Postgraduate Thesis, Criminal Sciences, Faculty of Human and Islamic Sciences, Ahmed Ben Bella 1 University, Oran, Algeria, 2015-2016, p. 19.

The legislator has granted the investigating judge full freedom to issue his orders and decisions in accordance with the dictates of his conscience. When examining whether sufficient evidence exists to substantiate the offense against the accused, the judge acts without relying on any specific legal rule of evidence. Consequently, it is up to him to determine whether the evidence is sufficient or insufficient, whether to refer the matter for trial, or to issue an order that there is no ground for prosecution—all based on his personal conviction. In other words, within the framework of the Code of Criminal Procedure, there is no provision that obliges the investigating judge to adopt any specific method for reaching conviction.

Similarly, the same applies to the Indictment Chamber, which examines appeals lodged against orders issued by the investigating judge or when a case file is referred to it in the context of a felony, in order to conduct an investigation as a second-degree investigative body. Article 195 of the Algerian Code of Criminal Procedure stipulates that if the Indictment Chamber finds that the facts do not constitute a felony, misdemeanor, or infraction, or that there is insufficient evidence to convict the accused, or if the perpetrator remains unknown, it shall issue a ruling of no grounds for prosecution¹. According to Algerian judicial precedent, the Indictment Chamber is not required to provide conclusive proof of guilt in order to refer the case to the misdemeanor or felony court; it is sufficient that there exist indications giving rise to the belief that the accused may have committed the alleged act. The court to which the case is referred remains competent to examine and establish the evidence².

If legal provisions have enshrined the principle of personal conviction to be applied before trial courts, this principle is also applied in practice before investigative authorities. This is implicitly derived from the first paragraph of Article 162 of the Algerian Code of Criminal Procedure, which states: “If the investigating judge finds that the facts do not constitute a felony, misdemeanor, or infraction, or that there is insufficient evidence against the accused, or if the perpetrator remains unknown”³.

Thus, when the investigating judge examines the existence of evidence constituting the crime against the accused, he determines whether such evidence is sufficient or insufficient, and accordingly decides either to refer the case for trial or to issue an order of no grounds for prosecution, as dictated by his conscience—that is, by his personal conviction⁴.

¹ Marhoul, Khira, Limits and Constraints of the Personal Conviction Principle of the Criminal Judge, Postgraduate Diploma Thesis, Criminal Sciences, Faculty of Human and Islamic Sciences, Ahmed Ben Bella 1 University, Oran, Algeria, 2015-2016, p. 15.

² Far, Jamila, “Impact of Forensic Expertise on the Discretionary Power of the Criminal Judge in Murder Cases,” Law and Liberties Journal, Faculty of Law and Political Science, Mohamed Khider University, Biskra, Vol. 13, No. 1, 2025, p. 383.

³ Article 161, Ordinance 66-155 containing the Code of Criminal Procedure, cited above.

⁴ Al-Arabi, Shahat Abdelkader & Nabil Saqr, Criminal Evidence in Light of Jurisprudence and Judicial Precedent, Dar Al-Huda, Algeria, 2006, p. 31.

If the evidentiary means vary in their probative strength, the investigating judge will therefore have a margin of freedom to issue any order in accordance with the conviction formed in his conscience, especially where the evidence is not conclusive, such as witness testimony, inspection, or even confession. However, the situation differs when the judge is faced with a decisive expert report in a technical matter upon which the issuance of the order may depend, and where the judge does not possess the requisite scientific knowledge to resolve it.

In such a case, although this type of evidence is, in theory, subject—like other means of proof—to the discretionary power of the judge and to the principle of freedom of evidence, whereby the investigating judge is not bound by any specific means of proof, even if scientific, in practice, the judge often finds himself compelled to rely on such evidence. This is due, on the one hand, to its strength and probative value, and, on the other, to the judge's inability to challenge scientific evidence owing to his lack of expertise in that field of knowledge.

This, in turn, may lead the judge to disregard his personal conviction and rely instead on the scientific evidence, which, in certain cases, may constitute a source of certainty in the field of proof. For instance, where a defendant is prosecuted for involuntary manslaughter, and the forensic pathologist concludes, after an autopsy, that the act of the defendant—committed negligently against the victim—occurred after the victim's death, meaning it could not have contributed to causing the death, the file before the investigating judge will lead to an order declaring that there are no grounds for prosecution, which is equivalent to an acquittal before the trial court.

Similarly, in the case of a medical report that leaves no room for doubt that a patient's death in hospital was due to a clear medical error by the surgeon—such as forgetting a sharp surgical instrument inside the victim's body—the investigating judge, in these and similar cases, will find no margin to apply his personal conviction except within the scope defined by the forensic expert. Consequently, the order issued by the judge will be a direct translation of the conclusions reached by the expert in his report.

The purpose of scientific expertise during the judicial investigation stage is to assist the investigating judge in forming his conviction regarding how to proceed with the investigation, which, in this case, concludes with either a decision that there are no grounds for prosecution or the referral of the case to the trial court¹.

However, although the investigating judge is likewise called upon to exercise his personal conviction when issuing orders concerning the disposition of the case—where scientific evidence may play a decisive role in influencing him, to the extent that it may even threaten his personal conviction and lead to its disregard in certain situations—this

¹ Amal Othman, *Expertise in Criminal Matters*, 1st edition, Dar Al-Nahda Al-Arabiya, Egypt, 1964, p. 110.

influence remains limited when compared to the role such technical evidence plays in shaping the personal conviction of the criminal judge at the trial stage.

3.3 Three Subtitle: The Effect of Scientific Expertise on the Personal Conviction of the Criminal Judge at the Trial Stage

The trial stage in criminal cases is regarded as the stage of final investigation, where legislation grants courts—under general rules—the right to employ all lawful means in the pursuit of truth, with the appointment of experts considered one such means¹.

It is in everyone's interest that the innocent be acquitted and the guilty be convicted, without error or confusion between the two, and that punishment reflects the proper application of the law, resonating with the sentiments of society—the rightful claimant in criminal proceedings—towards the crime, without excess or leniency. It is also in the public interest that the word of justice be decisive and swift so that the emotions disturbed by the crime may find calm and satisfaction.

However, while speed in justice is a great virtue, the absence of haste is an even greater one. It is in no one's interest for a judicial ruling to be issued without being supported by sound reasons for conviction—reached after calm deliberation and balanced argumentation from every party with a legitimate stake in the proceedings. Otherwise, the ruling would be unworthy of citizens' trust in the purpose of establishing the judicial system as a whole².

The court's right to appoint judicial experts, as previously explained, is established under the general rules of criminal evidence, as the court is fundamentally entitled to ascertain the truth by all lawful means³.

Although the expert enjoys independence in carrying out his technical or scientific work, and has the freedom to perform his task provided it is done in compliance with the law, the latter grants the judge the authority to undertake various measures during the expert's execution of the expertise.

The role of the court does not end with merely ordering the expertise; rather, it extends to exercising oversight over the expert's work throughout the duration of his assignment. This is to ensure that the expert does not delay in completing the required expertise, nor is he left alone to face difficulties or obstacles that may hinder him in the performance of his duties⁴.

¹ Mohamed Ghaleb Al-Rihili, *ibid.*, p. 65.

² Obaid, Raouf, *Principles of Criminal Procedure in Egyptian Law*, Dar Al-Fikr Al-Arabi, Cairo, 1985, p. 553.

³ Ammal, Othman, *Ibid.*, p. 110.

⁴ Mohamed Hazit, *Judicial Expertise in Civil and Administrative Matters*, Dar Houma, 1st edition, Algeria, 2014, p. 142.

In this regard, it should be noted that if the court relies on the expert's report, it must be the court that appointed the expert, and the report must be submitted in connection with the case before it. The appointment of the expert must have been carried out in the presence of all parties to the case. Therefore, the expert's report cannot be invoked against someone who was not a party to the proceedings in which the expert was appointed. Moreover, the report must be valid and free from any procedural nullity¹.

Scientific evidence and its framework require technical expertise that lies outside the judge's legal training, as previously mentioned. It is said that scientific and technological developments may dominate the system of judicial conviction, giving the judicial expert the final say, leaving the trial judge with nothing to do but comply with the expert's opinion without exercising any assessment of his own².

The system of scientific evidence is not incompatible with the criminal judge's authority to assess it; such evidence will undoubtedly serve as an effective tool for the judge in uncovering the truth. No matter how competent the expert is, and regardless of the accuracy and objectivity of the results, they remain insufficient to achieve justice—justice that requires a special judicial sense that the expert does not possess and that only the judge can perceive. The expert provides the necessary consultation to remove ambiguity and confusion in technical matters, but it is the judge who, after understanding it, rules based on it and on the rest of the evidence, according to his overall conviction³.

Judges possess absolute authority: they may approve expert reports in whole or in part, render judgment without ordering a new expert examination, rule contrary to the experts' opinions, annul expert reports in whole or in part, or order new expertise whenever they deem it useful⁴.

The characteristics that distinguish scientific evidence may lead some to claim that the broader the scope of scientific expertise, the smaller and more diminished the role of the criminal judge in assessment. However, this assumption is misplaced, as it is necessary to distinguish between two matters: the first is the conclusive scientific value of the evidence, and the second is the circumstances and conditions under which the evidence was found⁵.

It is worth noting that mutual understanding between judges and experts is not always easy. Judges sometimes request from experts clarifications or forms of assistance that are scientifically meaningless, and at other times they pose improper questions,

¹ Boulouj, Abdel Ali, *Judicial Expertise and the Judge's Authority to Adopt It*, Graduation Thesis, Higher School of Magistracy, Algeria, 2010, p. 50.

² Fathi, Mohamed Anwar Ezzat, *Ibid.*, p. 83.

³ Khirani, Fawzi, *Ibid.*, p. 198.

⁴ Mahmoud Tawfiq Iskandar, *Judicial Expertise*, 6th edition, Dar Houma, Algeria, 2010, p. 83.

⁵ Ahmed Salama Badr, *Constraints on the Criminal Judge's Assessment of Evidence in Egypt and the Gulf States*, 1st edition, Dar Al-Nahda Al-Arabiya, Egypt, 2017, p. 191.

making it difficult to respond in a way that serves the facts. Moreover, experts often do not have full access to the case file from which the traces or documents under analysis were obtained, which can sometimes render their conclusions unconvincing to the judge¹.

Nevertheless, this does not mean that the possibility of mutual understanding between them should be excluded altogether. Over time, through regular interaction, joint work, and the accumulation of experience in such collaboration, a foundation for effective understanding between the two parties may well be established².

The stage of drafting the judgment is considered the final phase of the judge's work, and it does not begin until the judge has formed a personal conviction regarding the facts and legal aspects of the case. Once the judge reaches such conviction—through any means of perception, conceptual reasoning, legal technical methods, or various evidentiary tools—he or she proceeds to the stage of linguistically formulating the judgment³.

The use of scientific expertise during the trial stage serves two purposes. The judicial expert who previously carried out a task before the preliminary investigative authority may be summoned to provide clarifications on the technical report he submitted. Alternatively, the expert may be requested to undertake a new assignment, whether related to an issue previously examined technically in the same case or not.

In this regard, the Italian Court of Cassation ruled that: “The general principle of the unity of expertise in identical matters may not be violated unless the trial judge determines that renewing the expert examination is necessary in order to render a correct judgment. Otherwise—that is, if the judge is able to issue his judgment based on other available elements—he may not order a renewal of the expert examination on the same subject”⁴.

If scientific expertise—due to its precision and objectivity—can directly influence prosecuting and investigating authorities to the point of sometimes eliminating their discretionary power, its impact before the trial judge can be even greater. Its purely scientific nature may hinder the judge from even classifying or discussing it as a means of proof, thus limiting judicial discretion and potentially overriding personal conviction.

This evidentiary weight puts the judge in a dilemma when such scientific proof conflicts with their own established conviction: either abandon personal judgment and accept the expert's findings, or reject them even if they are definitive.

In complex cases, courts often refer the matter to an expert, who reviews the relevant documents and evidence and submits a report to the court. A significant portion of the

¹ Bahloul, Malika, *Role of the Scientific and Technical Police in Crime Detection*, PhD Thesis, Faculty of Law, University of Algiers 1, Algeria, 2013-2014, pp. 191-192.

² Bahloul, Malika, *Ibid.*, p. 192.

³ Basyouni, Hassan El-Sayed, *Traditions and Methodology of Judicial Work*, 1st ed., Al-Dar Al-Handasiya Press, United Arab Emirates, 2011, p. 117.

⁴ Fathi, Mohamed Anwar Ezzat, *Ibid.*, p. 118.

court's ruling may rely on the findings of this judicial expert. Thus, the expert report—being scientific in nature—becomes a highly important element before the court, as the expert's work is intended to assist the court in issuing a fair judgment and ensuring that rights are properly delivered to their rightful holders¹.

In this context, it is natural for the criminal judge, when issuing a verdict, to rely on reason and logic. Consequently, the judge tends to favor evidence that can be verified for its logical and rational consistency and assessed scientifically with precision and sound judgment².

In such cases—even if the accused has confessed to the crime—the judge may find little room to exercise personal conviction. The conclusive nature of scientific evidence may lead the judge to set aside their own judgment, effectively compelling them to answer “no” to the central question of the accused's guilt, even though the law does not require the judge to justify their personal conviction³.

In practice, however, the situation unfolds differently. A judge who initially acknowledged their lack of expertise in a specific matter often ends up relying on the conclusions of the judicial expert as presented in their report, using them as the foundation for forming personal conviction. This reliance occurs when the judge perceives integrity and objectivity in the expert's work, ensuring confidence in the validity of their own ruling, particularly when the evidence is scientific and based on precise, reliable methodologies that leave little room for doubt or speculation.

Thus, the judge frequently accepts the expert's findings and builds their judgment upon them. This approach is logical, as the expert's opinion pertains to a technical matter beyond the judge's competence, and neither the judge's legal knowledge nor judicial experience suffices to independently decide on it. Furthermore, the judge is the one who appointed and supervised the expert, placing trust in their work⁴.

4- Conclusion

This study confirms that scientific expertise has become an essential tool in criminal evidence due to its accuracy and objectivity, sometimes directly influencing the criminal judge's personal conviction. Nevertheless, Algerian law does not grant expert reports a higher evidentiary weight than other types of evidence, leaving the judge free to exercise discretion in evaluating all forms of proof, including scientific expertise.

Scientific expertise often guides judges and prosecutors, particularly in complex or

¹ Iman Mohamed Ali Al-Jabri, *The Criminal Judge's Certainty*, Mansh'at Al-Ma'arif, Egypt, 2005, p. 121.

² Abdel Hafiz Abdel Hadi Aber, *Criminal Evidence by Presumptions*, Dar Al-Nahda Al-Arabiya, 1st edition, Egypt, 1991, p. 757

³ Ahmed Baaziz, *Forensic Medicine and Its Role in Criminal Evidence*, Master's Thesis, Specialization in Medical Law, Faculty of Law and Political Science, University of Abu Bakr Belkaid, Tlemcen, Algeria, 2010–2011, p. 91.

⁴ Hilali, Abdullah Ahmed, *Ibid.*, p. 1256.

technical cases, making reliance on expert findings practically necessary for sound decision-making. However, the judge retains the decisive role in weighing evidence, balancing all elements, and issuing a final judgment that ensures justice. Thus, the judge's discretionary power is complemented, not replaced, by scientific expertise.

Recommendations

1. Define the scope of judicial discretion: Establish clear limits on the judge's authority in accepting or rejecting expert reports.
2. Legislate and regulate expert use: Introduce legal provisions governing the appointment of experts in technical cases, with strict penalties for falsifying or manipulating reports.
3. Enhance collaboration between judges and experts: Develop joint training programs to improve judges' understanding of scientific and technical matters.
4. International training workshops: Organize international seminars for judges on effectively utilizing scientific reports in criminal proceedings.
5. Periodic review of expert reports: Implement continuous oversight of expert reports to ensure their accuracy and reliability, preventing errors that could affect the criminal process.

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