



“BABEȘ-BOLYAI” UNIVERSITY OF CLUJ-NAPOCA
FACULTY OF LAW



PhD THESIS SUMMERY

THE METHODOLOGY OF INTERDISCIPLINARY RESEARCH OF SUSPICIOUS DEATHS THROUGH PROFILING TECHNIQUES

Doctoral Supervisor:

Associate Professor PhD Habil. SORIN ALĂMOREANU

PhD Student

URECHE BIANCA-ANDREEA

CLUJ-NAPOCA

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1. Justification for the Choice of the Topic and Its Importance

The present paper, entitled „**The Methodology of Interdisciplinary Investigation of Suspicious Deaths through Profiling Techniques**”, aims to address a current and fundamentally important topic within the field of Criminalistics, with relevance at both national and international levels. The investigation of suspicious deaths is an area undergoing continuous development; however, in the Romanian specialized literature, there is currently no clearly defined approach that systematically combines traditional criminal investigation techniques with modern methodologies.

The choice of the topic „**The Methodology of Interdisciplinary Investigation of Suspicious Deaths through Profiling Techniques**” is primarily motivated by the essential importance that the investigation of suspicious deaths holds for establishing judicial truth and ensuring the delivery of justice. Although often treated with less attention, suspicious death represents a major challenge for the judicial system, bearing profound legal, social, and ethical implications. In our view, this phenomenon constitutes one of the most complex and sensitive situations encountered in judicial practice, requiring a detailed and multidisciplinary analysis to determine the exact circumstances under which death occurred.

Another key reason behind selecting this topic lies in the necessity to deepen a field of research that has, until now, been insufficiently explored. The investigation of suspicious deaths has not yet been addressed in such a broad, multidisciplinary context, integrating profiling techniques and applying them systematically within this domain. Although there are studies concerning the profiling of unknown offenders and the applicability of this method in cases of homicide or other serious crimes (such as serial offenses), suspicious death, as a legal phenomenon, has not benefited from an in-depth analysis from this perspective. This doctrinal gap highlights the timeliness and high practical relevance of the chosen topic, particularly in the current context where situations involving deaths under suspicious circumstances are increasingly common, and their investigation presents ever more complex challenges to judicial authorities. Whether we are dealing with cases of death of uncertain etiology, situations where there are suspicions of omission in providing medical care, suicides that raise unanswered questions, or crimes disguised as accidents, the need for modern, interdisciplinary investigative methods becomes evident.

Moreover, in this context, profiling represents one of the most innovative complementary investigative methods, especially employed in violent and serial cases. Its significance derives from its capacity to outline a psychological and behavioral profile of the offender based on the traces and behavioral patterns observed at the crime scene. This method contributes to narrowing

down the pool of suspects and increasing the efficiency of criminal investigations; however, its application in Romania remains limited. Therefore, this research aims to analyze the possibilities of integrating profiling into the methodology of investigating suspicious deaths, offering a scientific framework adapted to the judicial and forensic realities of the Romanian system.

Furthermore, the justification for the present topic is grounded in the need to integrate three essential domains: Criminalistics, Forensic Medicine, and Behavioral Analysis (Profiling). The investigation of suspicious deaths requires a complex approach, in which each of these disciplines contributes specific methods and perspectives, together forming a unified investigative framework. Criminalistics provides the technical-scientific tools necessary for crime scene investigation and the identification of traces and material evidence; forensic medicine offers expertise in determining the medical causes of death, the circumstances of its occurrence, and the biological context of the fatal event; while profiling adds an indispensable psycho-behavioral dimension essential for understanding the offender's *modus operandi* and for developing coherent investigative directions. Only through the integration of these three pillars can the investigation of suspicious deaths become truly effective, offering an integrative and multidimensional perspective on the criminal event, which underscores the profoundly interdisciplinary nature of the proposed approach.

An additional fundamental aspect that underlies the choice of this topic is the passion for profiling, which has been evident since my university years and has shaped the direction of my academic research. My in-depth study of this technique has driven me to explore how it can be applied to the investigation of suspicious deaths, integrating both theoretical aspects and practical proposals regarding the use of profiling within the Romanian judicial system. In this endeavor, participation in numerous national and international conferences on Criminalistics and Forensic Medicine played an essential role, offering me the opportunity to interact with specialists in the field, to analyze international trends in the use of profiling techniques, and to understand the challenges faced by judicial systems in applying this method. These academic and professional experiences have provided me with an interdisciplinary perspective and helped me to develop a clearer vision of the need to modernize and adapt Romanian Criminalistics to Western standards.

2. Structure of the Paper

This paper is structured into five chapters, each organized into sections and subsections. It is preceded by an introductory chapter and concludes with a set of findings derived from the scientific research undertaken. The final chapter is dedicated to general conclusions and proposals formulated on the basis of the conducted research.

The structure rests on several interdependent pillars, beginning with general and defining

concepts regarding suspicious deaths, profiling techniques, and the importance of criminal investigation in such cases. It continues with a detailed presentation of the evidentiary procedure of crime scene investigation—an indispensable process for establishing the factual situation and uncovering the truth—followed by an overview of forensic examination within the investigation of suspicious deaths and its crucial role in criminal inquiries. The final part focuses on the contribution of profiling techniques to the investigation of suspicious deaths and how these methods can enhance the efficiency of the criminal investigative process from its initial stages.

The **first chapter**, entitled „**Introductory Theoretical Concepts**”, establishes the conceptual framework necessary for investigating suspicious deaths. It provides a clear delineation of the fundamental terms and offers an inter- and multidisciplinary analysis of the subject. Within this chapter, we address both the legal and thanato-etiological definitions of suspicious death, identifying the circumstances under which a death is considered suspicious and conceptually distinguishing it from other terminological notions. We emphasize that a suspicious death is characterized by the ambiguity of its circumstances and the necessity for detailed investigation to establish its nature—whether violent or non-violent.

In **section 1.2, „The Importance and Role of Criminal Investigation in Suspicious Deaths**”, several guiding ideas are presented regarding the contributions of Criminalistics to the investigation and resolution of suspicious death cases. It is summarized that criminalistic tactics and methodologies hold a critical position in the stage of criminal investigations aimed at establishing the truth. A key element of this analysis highlights the social and legal impact of the investigation process, through the lens of the need for precision in clarifying the circumstances of death, preventing judicial errors, and ensuring effective justice.

The chapter also explores the role of multidisciplinary teams in the investigation of suspicious deaths, stressing the necessity of collaboration among specialists from complementary fields—such as forensic pathologists, criminalists, psychologists, and, where necessary, experts like bomb technicians, toxicologists, and anthropologists. This approach emphasizes the importance of integrated expertise, enabling more accurate data interpretation and reducing the risk of premature or erroneous conclusions.

The second part of the chapter provides a detailed introduction to the technique of profiling, presenting multiple definitions from both international literature and Romanian doctrine, including that proposed by Dr. Neculai Spirea Zamfirescu, the pioneer of psycho-criminalistics in Romania. It is underlined that profiling is not merely a tool for identifying unknown perpetrators but also a crucial means of guiding criminal investigations through behavioral analysis of offenders, correlated with characteristics of the crime scene, the victim,

and the broader criminal context.

A brief historical overview of profiling is introduced, tracing its evolution from early empirical attempts in the 19th century to the investigative analysis methods used by international agencies such as the FBI. This historical perspective provides a necessary foundation for understanding the complexity and applicability of profiling, particularly in the context of investigating suspicious deaths—a subject further developed in Chapter IV.

The chapter's significant contribution lies in including definitions from investigative interview guides used in criminal investigations, offering an applied perspective on profiling techniques. Additionally, it argues for the necessity of a holistic approach to crime scene analysis, where the profiler examines the criminal field from three fundamental perspectives: those of the offender, the victim, and the witness. This methodological approach is essential for an objective and comprehensive interpretation of cases, enabling the identification of relevant behavioral patterns and the avoidance of misinterpretations.

Thus, this first chapter lays the theoretical groundwork necessary for in-depth research, providing a clear understanding of the concepts that will be employed throughout the paper and highlighting the importance of integrating these techniques into the criminal investigation of suspicious deaths.

The **second chapter**, entitled **„Crime Scene Investigation of Suspicious Deaths”**, presents a comprehensive and detailed analysis of the investigative methodology applied in cases of suspicious deaths, emphasizing both theoretical aspects and practical implications. Its structure is well-defined, comprising five main sections that systematically address the investigation of the crime scene. The evidentiary procedure of crime scene investigation—referred to in the American judicial system as crime scene investigation or the examination of the crime scene—is extensively discussed to underline its critical importance in the criminal inquiry.

Chapter II begins by addressing the procedural aspects of on-site investigation, including the significance of terms such as "on-site" and "crime scene," and discusses tactical aspects by presenting the general tactical framework for carrying out such activities. This includes preparations made by the investigation team and the preliminary measures taken upon arrival at the scene, as well as the tactical rules governing the investigation itself.

In **section 2.3, „The Actual Crime Scene Investigation”**, the particularities of investigating crime scenes in cases of violent crimes are discussed. The structure of crime scene investigation—static and dynamic phases—is examined, while acknowledging that this division is often conventional, as the two phases tend to naturally overlap in practice. This section also addresses controversial or negative circumstances, emphasizing their significance in potentially

influencing the direction of the investigation and generating serious erroneous conclusions if not properly analyzed. Staging phenomena (i.e., the manipulation of crime scenes) and its differentiation from precautionary actions are analyzed, along with a proposed typology of controversial circumstances (general and specific), aimed at underscoring the importance of correctly interpreting physical evidence found at the crime scene.

The chapter further elaborates on methods for recording the results of the investigation, including both traditional and modern technologies that enhance precision and efficiency. A new generation of three-dimensional measurement equipment (e.g., SmartDraw, AutoCAD), drone surveillance, virtual and augmented reality tools, and more are presented as valuable instruments in crime scene documentation.

The following section presents the new technologies applied in forensic science, their impact on the investigation of the crime scene, as well as the integration of artificial intelligence into crime scene documentation. I have highlighted the benefits of using 3D scanning and artificial intelligence (AI) in the investigation process of suspicious deaths, emphasizing that these methods provide detailed and accurate documentation. They contribute to optimizing the investigative process, to the digital reconstruction of the crime scene, and to preserving the crime scene in a digital format. This allows for later review of on-site elements and their use in the reconstruction of the event.

At the same time, I have underscored the importance of integrating AI into criminal investigations, given its ability to identify patterns, automatically process large volumes of data, establish connections between pieces of evidence, and suggest possible scenarios regarding the commission of the offense.

The limitations of these technologies are also presented, such as high costs, the need for specialists to interpret the data, vulnerability to cyberattacks, and the possibility of software errors.

Further, in the context of presenting judicial errors, I have proposed a classification of such errors based on the procedural phase in which they may occur and the nature of the factors that generate them, thereby emphasizing their impact on the criminal investigation. Additionally, I have proposed complementary rules aimed at minimizing the risks of such errors and improving the methodology of crime scene investigation.

Continuing this approach, I addressed the interpretation of traces found at the crime scene, presenting their typology and their role in developing investigative hypotheses, as well as the significance of these hypotheses in the investigative process. In this context, I have shown that the correct interpretation of traces contributes to establishing the mechanism of the act,

identifying the perpetrator, and determining the circumstances in which the offense was committed.

A particular aspect of the research—analyzed in detail in Chapter III for reasons of coherence and structure—is the examination of the body by the forensic pathologist. This prenecropsy examination is carried out on-site, in the presence of judicial authorities.

Starting from the opinion that „*the crime scene investigation is a pivotal initial stage in resolving criminal cases, with the quality of this phase determining the course of the subsequent investigation*”¹, the final section of this chapter will be further elaborated upon, namely *The assessment by judicial authorities of the legal classification of the act that caused the death, based on the findings from the crime scene investigation and other examination data*. I have used the term “assessment” because it is necessary to corroborate the crime scene findings with the conclusions of the forensic examination, other complementary data, and profiling-based evaluation results to reach a legally accurate classification. It has been highlighted that, in the early stages of the investigation, the offense may receive a certain legal classification; however, as the investigation progresses, this classification may be reconsidered, due to the correlation between the data obtained from the scene, the medico-legal examination, and behavioral analysis.

Chapter Two emphasizes the essential role of crime scene investigation in the analysis of suspicious deaths, underlining both theoretical and methodological aspects, as well as the practical challenges encountered in this activity. The personal contribution is reflected in the original classifications of judicial errors and controversial circumstances—elements that may contribute to improving investigation standards and reducing the risk of misinterpretations. Moreover, this chapter demonstrates the need for integrating advanced technologies in the investigation process, offering a modern and efficient methodological framework for crime scene analysis.

Chapter III, entitled „The Value of Forensic Examinations in the Investigation of Suspicious Deaths. The Contribution of Profiling Techniques”, analyzes the importance of forensic expertise in investigating suspicious deaths, highlighting the essential role of collaboration between forensic medicine and criminalistics in establishing the circumstances surrounding the death.

The first part of the chapter presents the fundamental elements of forensic thanatology, including the stages and signs of death, with the aim of determining the time and cause of death. These aspects are addressed from the perspective of their impact on the investigative process,

¹ S.Alămoreanu, *Elements of Forensics*, Alma Mater Publishing House, Cluj-Napoca, 2000, p.161.

with particular emphasis on distinguishing between natural death, accidental death, suicide, and homicide.

A central element of the chapter is the forensic autopsy, an essential procedure for determining the medical cause of death and clarifying the circumstances under which the death occurred. Emphasis is placed on modern methods used in the examination of corpses, such as virtual autopsy (virtopsy), which operates using advanced technologies such as computed tomography (CT), magnetic resonance imaging (MRI), and radiography. These tools allow for a detailed analysis of injuries without compromising the integrity of the victim's body. Such methods are particularly useful in cases where traditional autopsy is limited, especially due to religious considerations. The advantages of applying these techniques, as well as their limitations, are presented. Among the main challenges are the high cost of equipment and the need for well-trained specialists. In this context, it is shown that modern technologies do not entirely replace the traditional autopsy, but rather complement it, as certain types of injuries or mechanisms of death still require direct evaluation.

In relation to this subject, the importance of integrating artificial intelligence into forensic analysis is also emphasized, representing a revolutionary step in the investigation of violent deaths. AI-based systems can assist in detecting discrepancies between observed injuries and the probable causes of death, thus providing support for the criminal investigation. This process, likewise, has both advantages and limitations, which are explored in the section dedicated to the integration of 3D scanning and artificial intelligence in crime scene documentation.

The following section addresses the field of forensic traumatology and the importance of differential diagnosis of injuries for establishing the mechanism of death. Forensic traumatology is a vast field that holds significant weight in the practical work of the forensic pathologist. Therefore, given its importance, the discussion has been limited to a review of the main types of traumatic injuries and their classification based on the mechanism of occurrence or the degree of damage to skin integrity. It is important to specify that, depending on the forensic interpretation of traumatic injuries and the determined cause of death—as set forth in the forensic conclusions—the legal classification of the act may be established to some extent. By analyzing the injury patterns in correlation with the cause of death, an initial differential diagnosis can be made between an alleged suicide and a homicide. Additional supporting elements include the circumstances uncovered during the crime scene investigation, forensic laboratory determinations, complementary examinations such as histopathology or forensic toxicology, as well as the conclusions of a profiling-based analysis. Thus, sufficient components may be gathered to determine the correct legal classification in the case of a suspicious death.

To provide this thesis with a coherent structure, the crime scene investigation has been divided into two separate chapters, with the medico-legal perspective being addressed in detail in the present chapter. In this regard, it has been shown that, from the perspective of the forensic pathologist, crime scene investigation is a primary activity, as valuable and immediate data can be obtained through direct and unmediated examination of the scene. The role of the pathologist is to serve as the medical interpreter of the organic changes that occur at the time of death. In continuing the investigation, the necessity of the forensic pathologist's presence at the scene is emphasized, to allow for the most accurate initial evaluation of the body and the circumstances in which it was discovered.

Moreover, it is considered appropriate to propose legislative intervention through the amendment of the Specific Procedure for Scene Inspection in Cases Where a Corpse Is Present (COD PSI – 05.01), specifically by introducing a new paragraph under section 6.4.1. "Examination of Corpses at the Scene" to expressly address the situation in which the forensic pathologist is not present. The chapter concludes by reiterating that the forensic pathologist is an integral part of the multidisciplinary investigative team, and their contribution is vital to ensuring that the investigation proceeds in a coherent and complication-free manner, avoiding misinterpretation.

The final part of this chapter is dedicated to the integration of profiling techniques into forensic analysis, with a focus on how forensic data can be used in developing a criminal profile. It is highlighted that the multidisciplinary approach combining profiling and forensic medicine significantly improves investigative efficiency and helps guide the direction of the investigation. For example, in a witness statement, it is claimed that the witness and the victim had a meal together six hours prior to the death. However, the autopsy report indicates an absence of food intake in the previous 24 hours. From such inconsistencies, multiple scenarios may emerge, potentially leading the investigation in different directions and resulting in an incorrect legal classification of the act. Some elements might go unnoticed either because they appear insignificant at the time or due to oversight. In this regard, we conclude with a pertinent observation made by profiler D. Kim Rossmo: *„A mistake, a coincidence, and bad luck can lead to an investigative failure; once a mistake has been made, the likelihood of additional errors increases; usually, the greatest problem is the refusal to acknowledge the initial mistake”*².

Chapter IV, entitled **„Enhancing the Efficiency of Investigative Analysis Through the**

² D.K.Rossmo, *Criminal Investigative Failures*, CRC Press: Taylor & Francis Group, Boca Raton FL, 2008, p.350.

Conceptual System Offered by Profiling Techniques”, addresses the issue of improving the effectiveness of criminal investigations through the application of profiling techniques, with a special focus on cases involving suspicious deaths. This part of the thesis emphasizes the importance of profiling and demonstrates that psycho-behavioral profiling constitutes an essential stage in optimizing criminal investigations when integrated into an interdisciplinary approach alongside forensic investigation and medico-legal examination. Emphasis is placed on the need for a modern investigative approach grounded in both scientifically validated methods and the practical experience of the professionals involved.

The first part of the chapter begins with an analysis of the main internationally recognized profiling methods, such as those developed by the FBI (crime scene analysis), David Canter (investigative profiling), Brent Turvey (behavioral evidence analysis), and Kim Rossmo (geographical profiling). The differences in approach among these methods are critically highlighted, along with the advantages and limitations of each, as well as the challenges that arise when attempting to adapt these models to the Romanian context. For example, it is noted that although Canter's techniques offer greater flexibility and adaptability through dynamic data updating, their applicability is limited due to the cultural and legal specificity of the British system, thus requiring adaptation to Romanian realities.

A central element of the chapter is the profiler's involvement not only during the initial phase of the criminal event investigation but also throughout the subsequent stages of the criminal proceedings. It is shown that the profiler's participation can bring significant benefits to procedural acts such as the interviewing of witnesses or suspects, the reconstruction of the crime, or the correlation of new evidence with the previously developed behavioral profile. It is demonstrated that the contribution of the behavioral analyst can positively influence interrogation strategies and the overall direction of the investigation by offering scientifically grounded insights into criminal behavior and the offender's motivation.

The chapter further highlights both the importance and the current methodological and legislative challenges in Romania, particularly in the absence of a unified methodology and standardized protocols for developing behavioral analysis. While in other countries such as the United States or the United Kingdom, criminal profiling methods enjoy official recognition and are included in the procedural framework, in Romania, the behavioral analysis report holds an ambiguous legal status. Currently, behavioral analysis functions more as an auxiliary investigative tool rather than as an independent legal piece of evidence. Accordingly, this chapter argues for the need to reconsider the regulatory and methodological framework applicable in Romania, proposing the development of a network of behavioral analysis specialists at the

territorial level and the institutionalization of continuous professional training through specialized courses and exchanges with international experts.

In Section 4.4, *Modern Technologies Integrated into Profiling*, the focus shifts to the importance of incorporating advanced technologies such as artificial intelligence and big data analysis into the profiling process to support investigations and anticipate criminal behavior. The use of such tools enables the processing of vast amounts of information from various sources, including social media, and allows for the rapid identification of correlations and behavioral patterns that might escape traditional analysis. Moreover, facial recognition technologies are used to corroborate information regarding unidentified perpetrators, while GIS-assisted geographical profiling systems contribute to identifying key locations such as the offender's probable residence or frequented areas. The integration of these modern technologies not only increases the accuracy and efficiency of profiling but also offers opportunities for proactive intervention in crime prevention. Through real-time data analysis and pattern recognition, it becomes possible to anticipate the potential actions of an unknown offender.

Finally, Subchapter 4.5, *The Contribution of Profiling in Solving Criminal Cases*, presents a series of concrete and relevant case studies that illustrate the practical applicability and effectiveness of profiling techniques in investigating suspicious deaths. This section provides a detailed presentation of cases in which the use of behavioral analysis methodology, integrated with forensic and medico-legal expertise, fundamentally changed the direction of the investigation and led to the reopening of cases initially closed prematurely as accidents or suicides. Through this interdisciplinary approach, the research confirms the decisive role profiling plays in increasing the efficiency of investigations into suspicious deaths and ensuring a fair judicial process.

Therefore, Chapter IV demonstrates that profiling techniques can bring significant added value to the investigation of suspicious deaths. However, their effective application in Romania requires overcoming structural, cultural, and legislative limitations. Through an interdisciplinary approach that combines forensic expertise, forensic medicine, and forensic psychology, a coherent and high-performing behavioral analysis system can be developed—one capable of contributing to the increased efficiency of criminal proceedings and the faster and more accurate resolution of complex cases.

Chapter V, entitled „**Conclusions and Proposals de Lege Ferenda**”, synthesizes the general conclusions of the research and formulates proposals de lege ferenda resulting from both theoretical and practical analyses conducted in the field of investigating suspicious deaths.

The first part presents the research conclusions, highlighting the necessity of an interdisciplinary approach in investigating cases of suspicious deaths, through the integration of forensic science, forensic medicine, and behavioral analysis—profiling. Emphasis is placed on the important role that behavioral analysis techniques can play in increasing the efficiency of investigations and in preventing judicial errors, particularly through the application of a three-dimensional perspective on the criminal environment: offender–victim–witness.

The chapter also highlights the current limitations in the use of profiling methods, caused by the lack of specialized professionals, insufficient integration into judicial practice, and the absence of clear regulations regarding the legal status of behavioral analysis reports.

In the second part of the chapter, concrete *proposals de lege ferenda* are formulated, aimed at improving the current legal and methodological framework. These include: the terminological clarification between „crime scene investigation” and „on-site investigation”; the clarification of the legal framework concerning the behavioral analysis report and the strengthening of the network of profiling specialists; the standardization of crime scene classifications within the methodology of criminal investigation; the implementation of modern electronic methods for documenting the official crime scene report; and the amendment of the Specific Procedure for Crime Scene Inspection in Cases Involving a Corpse (COD PSI – 05.01).

Chapter V concludes the research by emphasizing the need for an integrated approach, supported by modern techniques and adequate legislative regulations, to ensure an efficient, objective, and thorough investigation of suspicious deaths. Furthermore, the proposals de lege ferenda formulated in this work aim to strengthen the normative and methodological framework for investigating suspicious deaths, as well as to support the development of specialized human resources, in order to modernize and optimize forensic investigations in Romania.

3. The Current State of Knowledge

To identify the current state of knowledge in the field of investigating suspicious deaths through profiling techniques, an extensive corpus of bibliographic sources was consulted. These include treaties, national and international scientific articles, manuals, and empirical studies from specialized literature. This comprehensive approach enabled a detailed analysis of the existing theoretical framework, the investigative methods currently in use, and the manner in which profiling has been integrated into judicial practice over time.

The analysis of these sources reveals that, although there are a number of studies addressing traditional techniques for investigating suspicious deaths, a significant gap remains between technological advancements and their application in criminalistics practice. The array of technical and scientific methods and tools used for investigating and documenting crime scenes

has not been adequately updated, and many emerging technologies—such as artificial intelligence, 3D modeling of crime scenes and traumatic injuries through virtual autopsy, and advanced data analysis—are either underutilized or completely absent from traditional criminal investigations. This highlights an urgent need to adapt investigative methodologies to new technological and scientific realities.

Furthermore, although profiling is widely used in other judicial systems, particularly in the United States and the United Kingdom, its application in Romania remains limited. The studies and works analyzed indicate that within our judicial system, profiling lacks standardization and does not specifically address the investigation of suspicious deaths. Moreover, profiling—as a component of behavioral analysis and as a method for identifying the psychological and behavioral traits of an offender—is often treated superficially and is not systematically integrated into the standard methodology for investigating suspicious deaths.

In addition, interdisciplinary collaboration between criminalistics, forensic medicine, forensic psychology, and other relevant fields (depending on the specifics of each case) is still insufficiently structured and optimized. This deficiency hampers the process of formulating coherent prosecutorial hypotheses and affects both the accuracy of evidence interpretation and the ability to correlate information obtained from various sources. A deeper integration of these disciplines could contribute to more precise investigations of violent cases and a reduction in the risk of judicial errors.

Moreover, at present, the investigation of suspicious deaths remains underexplored and underdeveloped at the doctrinal level, despite its fundamental importance to the judicial system. Although there are specialized studies and works addressing individual aspects of suspicious death investigations, these are often fragmented and fail to offer an integrated perspective on the subject. The absence of a unified and coherent approach within the specialized literature means that investigations in this field rely largely on the experience and professional training of judicial authorities, rather than on a standardized and systematic methodological framework.

4. Theoretical and Practical Importance

The **theoretical significance** of this research lies in its contribution to the development of the methodology for investigating suspicious deaths through the integration of modern investigative techniques. The study offers a detailed analysis of fundamental concepts related to suspicious death, crime scene investigation, forensic traumatology and autopsy, as well as profiling techniques, emphasizing the necessity of an interdisciplinary approach for a better clarification of the circumstances that led to death.

It also enriches the specialized literature by providing a synthesis of both traditional and

modern methods used in the investigation of such cases, while highlighting their limitations and shortcomings. A key element of the theoretical importance is the critical analysis of investigative methods used to date, in correlation with the advantages offered by emerging technologies.

An important theoretical contribution of this work is the creation of original classifications of judicial errors and controversial circumstances, which enhance the scientific literature and offer a systematic framework for identifying and preventing such deficiencies in practice.

The **practical relevance** of these classifications lies in the fact that they offer judicial authorities a clear perspective on the factors that may negatively influence the investigation process, helping them adopt effective strategies to minimize errors, thereby increasing accuracy and objectivity in discovering and establishing the truth.

Another particularly relevant aspect of the practical significance relates to the improvement of initial and continuing professional training programs for forensic investigators, by promoting the use of modern technologies in crime scene investigation and in the analysis of evidence found at the scene. This study supports the need to modernize the training process of professionals in the field in order to enhance their professional competencies and to develop more effective investigative strategies.

5. Research Hypotheses

General Hypothesis:

- The application of profiling methods in the investigation of suspicious deaths contributes to increasing the efficiency of case resolution by facilitating the faster and more accurate identification of perpetrators and reducing the risk of erroneous or premature hypotheses regarding the circumstances of death.

Specific Hypotheses:

- Profiling techniques are insufficiently utilized by judicial authorities in cases involving suspicious deaths.
- The use of profiling in the investigation of suspicious deaths helps differentiate the nature of the death—murder, suicide, accident, or natural death—through behavioral analysis of the victim and potential perpetrator.
- Investigating suspicious deaths requires an interdisciplinary approach that integrates methods and knowledge from various fields such as criminalistics, forensic medicine, forensic psychology, and profiling.
- The use of modern technologies in documenting crime scenes contributes to minimizing judicial errors and increases the evidentiary efficiency in cases involving suspicious deaths.

- It is necessary to develop and strengthen the field of "Behavioral Analysis" within the Romanian Police, both through the establishment of specialized territorial structures at the county level and through the continuous professional development of specialists/practitioners.

6. Research Objectives

The **general objective** of this thesis is the theoretical and methodological analysis of how profiling techniques can contribute to solving cases of suspicious death and the assessment of their effectiveness in accurately determining the cause of death and any potential criminal involvement.

Specific Objectives:

- To understand the general framework of behavioral analysis methods used in investigating suspicious deaths.
- To analyze the conceptual and normative framework regarding the investigation of suspicious deaths, with an emphasis on integrating forensic and criminalistic contributions in determining the causes and circumstances of death.
- To establish the importance of an interdisciplinary approach in investigating suspicious deaths and highlight its benefits for the quality of justice.
- To identify and systematize modern methods and techniques for crime scene investigation in cases of violent crime, particularly those involving suspicious deaths.
- To determine the value of forensic expertise in the investigative process and analyze how forensic data, correlated with behavioral analysis, can underpin plausible scenarios regarding the events' criminal context.
- To apply profiling techniques in the practical investigation of suspicious deaths.
- To identify the limitations and vulnerabilities associated with the application of profiling techniques.

7. Novelty and Originality of the Research

This research offers an innovative perspective on the methodology of investigating suspicious deaths by combining an inter- and multidisciplinary approach, integrating elements from criminalistics, forensic medicine, criminal procedure law, forensic psychology, and criminology. This comprehensive vision allows for an extensive correlation of all information contained in the case file, enabling the accurate establishment of the circumstances of death and the proper legal classification of the act. A significant contribution of this paper is the integration of profiling techniques into the investigation of suspicious deaths, providing a complementary analytical method that facilitates the identification of behavioral patterns of the perpetrator and

the establishment of relevant connections between elements found at the crime scene.

An original aspect of the research lies in the proposal of innovative classifications of judicial errors and controversial circumstances during crime scene investigations. These classifications not only clarify the investigative process but also contribute to the efficient organization of inquiries, reducing the risk of misinterpretations. Establishing clear principles underpinning the classification of judicial errors enables a more systematic investigation of these issues, identifying their sources and their impact on the criminal process.

Another original aspect refers to the proposal to modernize the investigative process by implementing advanced technological solutions. Digitizing the crime scene investigation report, with automatic integration of GPS coordinates, photos, and audio-video files, would allow secure, real-time access to relevant data for judicial authorities. Moreover, implementing an electronic signature system to validate the authenticity of documents would reduce the risk of forgery and manipulation of evidence, ensuring a safer and more transparent investigative process.

An additional innovative direction addressed in the paper is the use of augmented reality and artificial intelligence in criminalistics. This could revolutionize both the training process for future criminalists and the practical activities of those already working in the field. Interactive simulations could allow the practice of complex investigative scenarios and the application of advanced techniques for crime scene analysis. Additionally, integrating AI algorithms into offender profile analysis could significantly improve the ability of judicial authorities to detect criminal patterns and establish links between seemingly unrelated cases.

The paper also proposes legislative changes aimed at improving the efficiency of on-site investigation procedures. A concrete example is the proposal to amend the Specific Procedure for Crime Scene Inspection (COD PSI 05.01) in cases where a cadaver is present, to clearly regulate the situation in which the forensic pathologist is not on-site. Such a modification could standardize the management of suspicious death cases and enhance collaboration between field specialists.

Thus, this research not only makes a substantial theoretical contribution but also provides concrete solutions for modernizing criminal investigations in cases of violent deaths—especially those occurring under suspicious circumstances—in alignment with international standards.

8. Research Methodology

This paper represents an applied, multidisciplinary scientific study with both national and international relevance, aimed at identifying the problems in the investigation of suspicious deaths and offering practical solutions through the integration of profiling techniques. The study proposes a complex, inter- and multidisciplinary approach, employing a research methodology

that combines both theoretical analysis and empirical research methods. In this regard, the scientific endeavor was structured across several methodological levels, enabling a comprehensive and relevant analysis of the topic.

To achieve the proposed objectives, the following research methods were used in this thesis:

- **Documentary Analysis Method** – To outline the theoretical framework of the paper, an extensive literature review was conducted, including both national and international works on the methodology of investigating suspicious deaths and the applicability of profiling techniques in this context. The bibliographic study encompassed key works in the fields of criminalistics, forensic medicine, criminal procedure law, criminology, forensic psychology, and related legislation. In addition to theoretical analysis, the research also involved the examination of relevant case studies to assess the practical applicability of profiling and its impact, along with forensic analysis, on investigating suspicious deaths. These case studies identified the main challenges, errors, and best practices in the investigative process, offering a comprehensive perspective on the use of this method.
- **Comparative Method** – Used to identify differences and similarities between the evidentiary procedure of crime scene investigation, autopsy processes, and profiling models employed in various international jurisdictions (e.g., FBI model, British model, European model), focusing on their adaptability to the Romanian criminalistics context.
- **Empirical Method** – Consisted of examining practical cases where profiling was applied in the investigation of suspicious deaths, aiming to highlight the efficiency, limitations, and challenges of this technique.
- **Observation Method** – Practical aspects of crime scene investigation were analyzed, with a focus on the use of profiling and modern technologies for documenting and interpreting traces found at the scene.
- **Semi-Structured Interview Method** – Specialized interview guides were designed to obtain opinions from experts in the field (criminal prosecutors, psychologists specializing in profiling, profiling experts, forensic pathologists), providing direct insights into the applicability of profiling techniques in criminal investigations. These interviews were structured to capture their views on the efficiency, limitations, and development prospects of profiling in the investigation of suspicious deaths. This process allowed for the collection of relevant qualitative data, contributing to the validation, invalidation, or refinement of conclusions drawn from theoretical analysis and case studies.

- **Inductive and Deductive Methods** – Used to draw conclusions from theoretical analysis and practical cases, and to formulate working hypotheses and recommendations applicable to crime scene investigations and forensic autopsies in cases of suspicious deaths.

- **Critical Method** – Applied in evaluating specialized literature, offering critical observations on existing theories and legislative regulations, and proposing alternative perspectives in relation to classical investigative methods or current challenges encountered in judicial practice. The aim was to identify theoretical and practical inconsistencies and to formulate solutions for improving the normative and methodological framework.

- **Classification and Systematization Method** – Used to organize the gathered information, resulting in the creation of original classifications regarding judicial errors and controversial circumstances arising during crime scene investigations.

TABLE OF CONTENTS

INTRODUCTION

CHAPTER I. INTRODUCTORY THEORETICAL CONCEPTS

- 1.1. General Considerations on Suspicious Deaths. Gnoseological Framing
- 1.2. The Importance and Role of Forensic Investigation in Cases of Suspicious Deaths
 - 1.2.1. The Social and Legal Impact of the Investigation Process
 - 1.2.2. The Role of Multidisciplinary Teams in the Investigation of Suspicious Deaths
- 1.3. Introductory Aspects of Profiling Techniques. Brief History
 - 1.3.1. The Connection Between Profiling and Crime Scene Analysis

CHAPTER II. CRIME SCENE INVESTIGATION IN CASES OF SUSPICIOUS DEATHS

- 2.1. General Considerations on Crime Scene Investigation
 - 2.1.1. Procedural Issues. Terminology
- 2.2. General Procedures Applicable in On-Site Investigations
 - 2.2.1. Action Preceding the Crime Scene Investigation
 - 2.2.2. Preliminary Measures Taken by the Competent Authorities
- 2.3. The Actual Crime Scene Investigation
 - 2.3.1. Tactical Rules Guiding the Entire On-Site Investigation Process
 - 2.3.2. The Static Phase
 - 2.3.3. The Dynamic Phase
 - 2.3.3.1. Aspects Regarding Controversial/Negative Circumstances
 - 2.3.3.2. Recording the Results
 - 2.3.4. Integration of 3D Scanning and Artificial Intelligence in Crime Scene Documentation
 - 2.3.5. Common Judicial Errors in the Crime Scene Investigation Process
- 2.4. Traces Identified at the Scene and Their Typology
 - 2.4.1. Interpretation of Traces and Their Role in Developing Investigative Hypotheses

2.5. Judicial Authorities' Assessment of the Legal Classification of the Act That Caused the Death Based on Crime Scene and Other Examination Data

CHAPTER III. THE VALUE OF FORENSIC EXAMINATIONS IN THE INVESTIGATION OF SUSPICIOUS DEATHS. THE CONTRIBUTION OF PROFILING TECHNIQUES

3.1. Elements of Forensic Thanatology

3.1.1. Stages of Death

3.1.1.1. Agony

3.1.1.2. Clinical Deaths

3.1.1.3. Biological Deaths

3.1.2. Signs of Deaths

3.1.2.1. Negative Signs of Life

3.1.2.2. Positive Signs of Death (Actual Signs of Death)

3.1.2.2.1. Early Positive Signs of Death

3.1.2.2.2. Late Positive Signs of Death

3.2. Forensic Autopsy

3.2.1. Forensic Autopsy Using Modern Technologies

3.2.1.1. Use of CT and MRI in Cadaver Examination

3.2.2. Use of Artificial Intelligence in Interpreting Forensic Data

3.3. General Aspects of Forensic Traumatology. Differential Diagnosis of Injuries

3.3.1. The Contribution of the Forensic Pathologist in Determining the Cause of Death

3.4. On-Site Investigation from a Forensic Perspective

3.4.1. Examination of the Body Within the Crime Scene Investigation

3.5. The Importance of Forensic Data in Conducting Investigative Analysis Based on Profiling Techniques

CHAPTER IV. ENHANCING THE EFFICIENCY OF INVESTIGATIVE ANALYSIS THROUGH THE CONCEPTUAL SYSTEM OF PROFILING TECHNIQUES

- 4.1. The Concept of Profiling and Its Role in Criminal Investigation
- 4.2. Internationally Used Methods
 - 4.2.1. FBI Method - Crime Scene Analysis
 - 4.2.2. David Canter's Method - Investigative Psychology (*IP*)
 - 4.2.3. Brent Turvey's Method - Behavioral Evidence Analysis (BEA)
 - 4.2.4. Geographic Profiling – Method Developed by Dr. Kim Rossmo
 - 4.2.5. Adapting International Models to the Romanian Context
- 4.3. Profiler's Participation in Other Procedural Acts Following the Crime Scene and Forensic Examination. Methodological and Legal Issues
- 4.4. Modern Technologies Integrated in Profiling
- 4.5. Case Study: The Contribution of Profiling Techniques in Solving Criminal Cases

CHAPTER V. CONCLUSIONS AND PROPOSALS DE LEGE FERENDA

- 5.1. General Research Conclusions
- 5.2. Proposals de Lege Ferenda

BIBLIOGRAPHY

APPENDIX 1

APPENDIX 2

APPENDIX 3

APPENDIX 4