

THE NAISSANCE OF FORENSICS IN SERBIA

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Abstract: The Serbian police gradually implemented scientific methods in legal proceedings and determinately kept up with the world in the application of the latest scientific achievements. The first step in this field was made by establishing the State Chemical Laboratory in 1859, which performed various expert analyses of evidence for the purpose of criminal investigation. Education in forensic medicine performed at the Faculty of Law starting from 1863 provided conducting forensic medical and anatomical pathological investigations, as well as histopathological and bacterial examinations. The same as in other European countries, starting from 1897, photography in Serbia was used in the investigation of criminal events in the penal system. So-called „Bertillonage“, based on anthropometry and also accepted worldwide as a reliable method for identification of criminals, was introduced in Serbia in 1904 when the Anthropometric Police Department was established. As soon as the methods of classification of the fingerprints were developed, dactyloscopy was advocated in Serbia and practiced in the Anthropometric Police Department since 1912. The developments interrupted by the Great War continued after its end. The Department of Technical Police established in 1921 in Belgrade and with jurisdiction on the entire state territory successfully performed its main task: it took care of photographing criminals and other dangerous persons, registered criminals and was a forensic-medical *laboratorium*. The analysis of birth and youth of forensic methods in Serbia will be performed in this paper in order to indicate that regarding forensic development Serbia in the 19th and early 20th centuries was not outside the European mainstream as well as it is not today.

Keywords: forensics, Bertillonage, dactyloscopy, photography, Technical Police

INTRODUCTION

The Serbian police gradually implemented scientific methods in legal proceedings and determinately kept up with the world in the application of the latest scientific achievements. The first step in this field was made by establishing the State Chemical Laboratory in 1859, which performed various ex-

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pert analyses of evidence for the purpose of criminal investigation. Education in forensic medicine performed at the Faculty of Law starting from 1863 provided conducting forensic medical and anatomical pathological investigations, as well as histopathological and bacterial examinations. The same as in other European countries photography was used in the investigation of criminal events in the penal system starting from 1897 in Serbia. So-called „Bertillonage“, based on anthropometry and also accepted worldwide as a reliable method for identification of criminals, was introduced in Serbia in 1904 when the Anthropometric Police Department was established. As soon as the methods of classification of the fingerprints were developed, dactyloscopy was advocated in Serbia and practiced in the Anthropometric Police Department since 1912. The developments interrupted by the Great War continued after its end. The Department of Technical Police established in 1921 in Belgrade with jurisdiction on the entire state territory successfully performed its main task: it took care of photographing criminals and other dangerous persons, registered criminals and was a forensic-medical laboratory. Monitoring and applying modern scientific methods in criminal investigations ranked the Serbian police high at the end of the 19th and in the first half of the 20th century.

HOW IT ALL STARTED

The society in the newly liberated Serbia of the first half of the 19th century was steadily marching towards the progress in desire to build a just society. One of the most important preconditions for achieving that goal was the identification and punishment of offenders (Krstić-Mistridželović, 2013:53-77). It took years while the state authorities entrusted with this task, especially the police, started using adequate methods whose application would result in an unequivocal identification of the perpetrators (Inman & Rudin, 2001: 329-343). In Serbia in the first half of the 19th century, as well as in other countries, the police officers were not formally educated in policing (Krstić-Mistridželović & Radojičić, 2015: 93-104; Braković & Krstić-Mistridželović, 2013:43-59). Learning through practice from older colleagues the secrets of the craft in investigating crimes conceptually prevailed in that time (Krstić-Mistridželović: 2011: 165-171).

A mention of the first case solved with the help of forensics in Serbia was preserved in an anecdote. Namely, Prince Miloš Obrenović realized the importance of chemistry already during his first reign. In 1833 he began sending Serbian mineral waters for analysis to Vienna and when his horse died without an obvious reason he had ordered for the horse's intestines to be sent for analysis to Vienna as well. Soon he received an answer that the horse died due to poisoning by cobbler's glue, used as leather adhesive for *opanci*. Based on the conclusion on chemists as very useful stuff in state matters, Prince Miloš ordered the establishment of the State Chemical Laboratory which would perform forensic expert analysis and the analysis of mineral waters (Vasilijević & Krstić-Mistridželović, 2021:11). Even though the first step in the institutionalization of forensics was made in order to solve the Prince's private problem, it led to the establishment of the State Chemical Laboratory in 1859. The State Chemical Laboratory was moved to the State Pharmacy established in 1837 and later to the laboratory of the Lyceum, until in 1882 a new building was constructed to be used solely by this autonomous institution (<https://kultura.rs/objekat/372-државна хемијска лабораторија>). In the following decades the State Chemical Laboratory successfully fulfilled its task by performing various expert analyses for the purpose of water supply, spa medical centres, quality control of food, as well as chemical analyses of evidence for police departments and the prosecutor's office.

Medicine also plays an important part in forensics. In the Miloš Obrenović's Serbia the physicians were included in the investigations of bodily injuries or deaths of citizens. The examination of the



dead was done by *muselim* – if a man died under suspicious circumstances he was not buried until *muselim*'s man arrived. The first forensic expert analysis of blood stains in Serbia was performed in 1830, while the routine performance of forensic medical autopsies was dated to 1880. The Department of Quarantine and Health Service within the Ministry of Internal Affairs was established in 1839 and the education in the field of forensic medicine started in 1863, when Prince Mihailo Obrenović signed the Law on the Establishment of the Great School. The initiator of the modern forensics in Serbia was a part-time professor of hygiene and forensic medicine at the Great School, Dr Aćim Medović. His main work "Forensic Medicine for Court, Police and Health Officials, Lawyers and Other Legal Workers" was published in 1866. Based on the Law on Organisation of Health Profession and Protection of Public Health signed by the Prince Milan Obrenović in 1881 (Srpske novine 1881, April 10) the Anatomical Pathology Department was established as a part of the General State Hospital in Belgrade. This institution in charge for solving practical tasks in the field of anatomical pathology started its full operation in 1897, when Dr Eduard Mihel came back from the Vienna where he specialised pathology and forensic medicine in the famous Institute for Anatomy and Pathology. The Anatomical Pathology Department with the Department for Autopsy was located in wooden barracks within the General State Hospital until the adequate new building was built in 1907. Apart from Dr Mihel it also employed Dr Milovan Milovanović and two of them began conducting forensic medical and anatomical pathological investigations, as well as histopathological and bacterial examinations. A Department of Forensic Medicine which was formed in 1919 was transformed into the Institute of Forensic Medicine of the Faculty of Medicine in Belgrade.

The forensics draws knowledge and methods also from physics, mathematics and statistics. The development of physics directly contributed to the ballistics and the analysis of material properties, as well as numerous calculations applicable in forensics. Mathematics and its methods have an important place in forensic science, as well as statistics, which is an unavoidable tool in all sciences. Statistics was a compulsory companion of the state apparatus in Serbia since 1834, when regular population census was introduced every five years, but the first State Statistical Service was introduced in 1864, when a special Statistical Department was formed within the Ministry of Finance. The Authority for Official Statistics, which consisted of a statistical bureau and a central statistical board, was established in 1881. The data regarding the crime statistics in Serbia were handled by the local police officers. Since the formation of the Ministry of Internal Affairs in 1839, local police officers in periodical reports presented to the Ministry the accounts of the committed crimes, weather disasters and natural catastrophes, as well as the movement and control of foreign nationals and possible occurrence of banditry. From 1862 until the onset of the First World War, 31 editions of special books and 17 themed volumes dedicated to criminal trials titled "Criminal Trials" were published.

Photography as a technique was developed in the 18th century and very soon after its discovery it found its place in police work. The application of photography yielded results in policing - the increased number of offenders were found thanks to the photographs distributed via internal courier service, as well as their official publishing in "Policijski glasnik", which made photography an auxiliary forensic technique (Jensen, 1981:322-323). The understanding of the importance of criminal records that included individual features of the offenders has grown thanks to photography. The police in Serbia in the second half of the 19th century used the services of the local photographic studios which multiplied the photographs of wanted persons that came from abroad. At the very end of this period the state authorities realised that they should organise photographic departments within the police offices. In order to make the most efficient search for a large number of fugitives from the penal institutions who committed crimes, compulsory photographing of all convicts was introduced in 1897. In 1899 all the local police officers were ordered to procure photo-albums of all the convicts photographed so far, as well as other bad people (IAB-1-1899-2119-259).



THE ANHROPOMETRIC POLICE DEPARTMENT

Despite internal and external instability the Serbian police gradually implemented scientific methods in legal proceedings and determinately kept up with the world in the application of the latest scientific achievements. One of the methods for individualisation of offenders that came into use thanks to Alphonse Bertillon was anthropometry, an auxiliary anthropological discipline that deals with the physical measurements of people. A Bertillon's card contained data obtained by measuring certain parts of the human body using special measuring instruments with the added description of specific physical characteristics – specific marks and photographs of profile and full-face in 1:7 ratio.

This procedure of measurement called “Bertillonage” was introduced in Serbia in 1904 by the Law on Measurement, Description and Identification of Perpetrators (Srpske novine 1904, December 21). According to the Law the Anthropometric Police Department for measurement and identification of offenders according to the Bertillon's system was established in Belgrade and its scope of activities was determined, while establishment of other anthropometric departments was planned in all towns that had a court of first instance, as well as the initiation of a training course for police officers. The Belgrade city administrator Dušan Alimpić, who studied the Bertillon's system of identification of offenders at the Romanian Ministry of Justice in Bucharest in 1900, was appointed the first Head of the Anthropometric Police Department within the Department of Public Safety at the Ministry of Internal Affairs. Placed in the building in the courtyard of the old building of the Belgrade City Police Administration, this Department performed its tasks by taking anthropometrical physical measurements including photographing and making records of anthropometric reports of offenders which were exchanged, if necessary, with foreign police services (Knežević-Lukić, 2019: 243, unpublished Doctoral dissertation). It also provided training police officers in measurement, description and identification of perpetrators.

According to the Law on Measurement, Description and Identification of Perpetrators two more Anthropometric Police Sections were established in Požarevac in 1906 and in Niš in 1908. Both of them were located at the Penal Institutions and supplied with the necessary equipment for photographing and physical measuring of offenders. All the prisoners at those prisons were photographed and measured as well. Records of anthropometric reports namely Bertillon's cards were made in Anthropometric Police Sections in Požarevac and Niš in two copies, one of which was submitted to the Anthropometric Police Department in Belgrade.

Introduced in 1904, Bertillonage in Serbia unlike other countries remained in use after the introduction of dactyloscopy, up until the 1920s. The uniqueness of an individual fingerprint was already noticed in the first half of the 19th century and in its last decade two methods for classification of fingerprints were developed (Cole, 2001: 128-129). The first one was Vučetić's system, made in 1892 and named dactyloscopy in 1896, and the other one was the Henry-Galton system made in 1896. Both of them implied the procedure of taking and processing fingerprints of offenders for their registration, as well as searching for fingerprints at the crime scene or taking the prints of the suspects in order to determine the identity of the perpetrator. Accepted first in America and England, the dactyloscopy in the first decade of the 20th century gradually suppressed the Bertillon's identification system in European countries. The first one who advocated dactyloscopy in Serbia was Vasa Lazarević, highly-ranked police officer in the Ministry of Internal Affairs. Together with Aleksandar Andonović, a clerk at the Anthropometric Police Department who was sent in 1911 to a professional course of forensics held by Dr Rodolphe Archibald Reiss at the Faculty of Law in Lausanne, Lazarević was the most deserving person for introducing dactyloscopy according to Vučetić's system in the Serbian police in 1912. The Anthropometric Police Departments in Belgrade, Požarevac and Niš took fingerprints of all prisoners



in those penitentiaries and entered them in an adequate field in the existing records of the Bertilon's anthropometric reports. By comparative application of both these methods the Serbian police had been achieving good results until the onset of the Great War.

THE DEPARTMENT OF TECHNICAL POLICE

The Anthropometric Police Department, whose building and all equipment were destroyed in the Austrian bombing of Belgrade in 1914, renewed its work after the end of the war in the building located at the 14-16 Kralja Petra Square mostly thanks to the efforts of Aleksandar Andonović and Archibald Reiss (Ribo, 2019: IX-XIII; Kenš, 2019: XIV-XX; Krstić-Mistrđželović, 2019: 23-35).

In 1921 the Department of Technical Police was established within the Belgrade City Police. The lack of unity in organization and functioning of the police in the new state – the Kingdom of Slovenes, Croats and Serbs had been overcome by metropolisation of the Belgrade Technical Police. Until 1921 it worked within its scope of activities in all corners of the country that did not have that kind of service and after that it also kept the register of all the convicts in the entire country. Archibald Reiss, who came to Serbia during the First World War upon the invitation of the Serbian Government to lead the investigation on the crimes committed by the enemy armies against the soldiers and civilians in Serbia (Krstić-Mistrđželović, 2014, 437-463; Krstić-Mistrđželović & Radojičić, 2015: 341-348), had been performing the duties of the Head of the fifth section of the Department of Technical Police namely the Section for identification from 1919 until 1922. It is thanks to his efforts that the laboratory of the Technical Police was completely equipped in 1922, which enabled the Technical Police to successfully perform its main task: taking care of photographing criminals and other dangerous persons, registering criminal world and being a forensic-medical *laboratorium*.

When in 1921 the First Police School in Belgrade, whose conceptual creator, founder, teacher and the first director was Reiss, was finally established, it was expected to educate professional staff capable of carrying on the police reform. It was located in a restored and upgraded building of the Department of Technical Police next to the old building of Belgrade City Police, so the students did all their practical forensic exercises in the laboratory of the Technical Police. After the Reiss resigned to all state duties, Aleksandar Andonović became the Head of the Technical Police and stayed at that position for a very long period (Kapetanović, 1930). Due to that fact that the Belgrade Technical Police was one of the best equipped and managed in the Europe before the onset of the Second World War. Andonović was also engaged as a teacher in the Institute of Criminology at the Faculty of Law of the Belgrade University established in 1929 (Janković, 2015: 326-346) and in the Police school in Zemun established in 1931 for whose students he wrote the first forensic textbook together with Sergey Tregubov (Vasiljević & Krstić-Mistrđželović, 2021: 31). The book named "Criminal Technique – Scientific-Technical Examination of a Criminal Act" published in 1935 was reviewed by internationally acclaimed criminology expert professor Boris Brasol as the foundation of scientific forensic examination in the Balkan countries (Brasol, 1936: 799-802).



CONCLUSIONS

The analysis of the naissance of forensics in the 19th century Serbia showed that the origins of the forensics in our country were very similar to those in other European countries. That comes out from the fact that the European and Serbian societies had been developing basically in the same way, i.e. social preconditions were created in them for the very same development, acceptance and application of forensics. The French revolution brought a prohibition of the use of force in collecting evidence and made the judicial systems search for new ways to find legally and scientifically irrefutable evidence (Campesi, 2016). Even though the practice of torturing and forcing suspects for the purpose of obtaining recognition remained present long after the French revolution, the evidence obtained in such a manner was never again considered as necessarily acceptable. The essentially new social circumstances gave rise to the idea that it was necessary for the judgement that would take away someone's freedom and civil rights to have an exact material foundation. That required involvement of the state, so in the last decades of the 19th century state laboratories and institutes in the fields of chemistry, forensic medicine, statistics and photography and police departments specialised in application of anthropometry, dactyloscopy, ballistics and photography began to appear worldwide.

19th-century Serbia was not outside the European mainstream in performing forensic methods as well as in the scientific and literary treatment of forensic topics. Police officers, investigating judges, prison wardens and lawyers were discussing the application of certain scientific methods in criminal investigations and translating the latest works of pioneers in forensics. Only few decades after two well-known literates – Charles Dickens in England and Emile Zola in France (Mangham, 2016: 4-9) created their works in a manner of forensic realism, the Serbian police officer Tanasije – Tasa Milenković wrote the socially engaged novels with forensic interpretations that aroused great interest both in domestic and foreign public. At the very beginning of the 20th century by founding the Anthropometric Police Department within the Ministry of Internal Affairs Serbia got an institution of reference for forensic examinations similar to those that were previously established in other European police forces.

The development of forensics in Serbia, together with its continuity and results, had not remained unnoticed in the inter-war period. The Department of Technical Police established in Belgrade in 1921 with its fully-equipped laboratory successfully performed registering and identifying criminals, as well as practical forensic training of students and police officers. Due to the application of modern forensic methods the Belgrade Technical Police in that time successfully conducted criminal investigations throughout the whole country and enjoyed a great international reputation as one of the most modern police services in Europe.

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