

**Heritage of Prof. Kuniyoshi Katayama, the founder of forensic medicine in Japan**

**Das Erbe des Prof. Kuniyoshi Katayama, Gründer der Rechtsmedizin in Japan**

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## Keywords

Kuniyoshi Katayama • History of forensic medicine • State medicine • Law Court medicine • Medical law in Japan

## Abstract

With the increase in medical litigation since 1999 in Japan, medical law education in university medical schools is becoming more important. Although Kuniyoshi Katayama (1855–1931) founded the field of Japanese forensic medicine, little attention has been paid to his contributions to medical law. We examined the three original texts of his major work—*Elements of Law Court Medicine* (copyrighted in 1882, published in 1888), *Elements of Forensic Medicine* (published in 1891) and *The Latest Lecture of Forensic Medicine: General Theory* (published in 1908)—and analysed the development of his thought on forensic medicine. His writings can be characterised as follows: In the first book, *Elements of Law Court Medicine*, which is based on the teaching of Ernst Tiegel and other German teachers, the explanation of the medical law was relatively simple because the modern legal system had not yet been prepared at that time in Japan. In his second book, *Elements of Forensic Medicine*, which he wrote after studying abroad in Germany and Austria, his theories were more complex. Katayama stated that it was necessary to understand the concept of *Staatsarzneikunde* (state medicine), with awareness of the differences between German and Austrian laws and Japanese law, and he emphasised the need to develop forensic medicine that was suitable for Japanese society. In his most noteworthy book, *The Latest Lecture of Forensic Medicine: General Theory*, written after the framework of the Japanese legal system was established, he explained the significance of understanding the legal system for all physicians and also presented guidelines for avoiding medical malpractice.

## Schlüsselwörter

Kuniyoshi Katayama • Geschichte der Rechtsmedizin • Staatsarzneikunde • Gerichtliche Medizin • Medizinrecht in Japan

## Zusammenfassung

Mit der Zunahme medizinischer Rechtsstreitigkeiten seit dem Jahr 1999 in Japan gewinnt die Ausbildung in Medizinrecht an den medizinischen Fakultäten der Universitäten an Bedeutung. Obwohl Kuniyoshi Katayama (1855–1931) in Japan das Gebiet der Rechtsmedizin begründete, wurde seinen Beiträgen zum Medizinrecht wenig Aufmerksamkeit geschenkt. Wir untersuchten die drei Originaltexte seines Hauptwerks – *Grundlage der Gerichtlichen Medizin* (urheberrechtlich geschützt 1882, veröffentlicht 1888), *Grundlage der Rechtsmedizin* (veröffentlicht 1891) und *Die Neuesten Vorlesungen über die Rechtsmedizin: Allgemeine Theorie* (veröffentlicht 1908) und analysierten die Entwicklung seines Denkens über die Rechtsmedizin. Seine Schriften lassen sich wie folgt charakterisieren: Im ersten Buch, *Grundlage der Gerichtlichen Medizin*, das auf der Lehre von Ernst Tiegel und anderen **deutschsprachigen Lehrern** basiert, war die Erklärung des Medizinrechts relativ einfach, weil das moderne Rechtssystem zu dieser Zeit in Japan noch nicht existierte. Die Theorien in seinem zweiten Buch, *Grundlage der Rechtsmedizin*, das er nach einem Auslandsstudium in Deutschland und Österreich schrieb, waren komplizierter. Katayama erklärte, dass es notwendig sei, das Konzept der Staatsarzneikunde zu verstehen, mit dem Bewusstsein der Unterschiede zwischen den deutschen und österreichischen Gesetzen und den japanischen Gesetzen, und er betonte, dass eine Rechtsmedizin entwickelt werden sollte, die der japanischen Gesellschaft entspricht. In seinem wichtigsten Buch, *Die Neuesten Vorlesungen über die Rechtsmedizin: Allgemeine Theorie*, das nach der Schaffung des Rahmens des japanischen Rechtssystems geschrieben wurde, erläuterte er die Bedeutung des Verständnisses des Rechtssystems für alle Ärzte und stellte auch Richtlinien zur Vermeidung von Behandlungsfehlern vor.

## Introduction

Since 1999, the number of medical lawsuits in Japan has increased rapidly and it has remained at approximately 800 per year in the last 10 years, according to a report by the Supreme Court of Japan [18]. In addition to lawsuits, the number of other legal problems in the medical field is rising. General practice guidelines help physicians avoid being sued in court; however, medical schools in Japan have not adequately provided medical law education for that purpose [4]. The significance of medical law education was advocated as early as the 19th century by Kuniyoshi Katayama (1855–1931) (Fig. 1), the founder of forensic medicine in Japan. Studying forensic medicine in Germany and Austria, Katayama strove to understand the concept of *Staatsarzneikunde* (state medicine) and contributed greatly to Japan's forensic education. Although some of his accomplishments, such as contributions to forensic autopsies and the field of psychiatry, are known, little attention has been paid to his medical law education.

Katayama was the first person who became aware of the notion; a person who aims to be a doctor should acquire medico-jurisprudence to practice medicine according to law; otherwise, they may make unexpected blunders in court [9,10]. He contributed significantly to medical education in the Meiji era during the formation of modern society; in particular, he emphasised the importance of legal medicine and became the first professor of forensic medicine at the Imperial University of Tokyo.

We describe his great vision of forensic medicine, with an analysis of the original texts of his three main books: *Elements of Law Court Medicine*, which was written in 1882, before he studied in Germany and Austria; its revised edition, *Elements of Forensic Medicine*, which was published in 1890 after he returned home; and his most noteworthy book, *The Latest Lecture on Forensic Medicine: General Theory*, published in 1908, which provided a new perspective of medical law education in Japan.

## Historical background

In 1867, the 15th shogun Yoshinobu Tokugawa restored political power to the Imperial Court and the samurai government that had lasted nearly 700 years since the Kamakura shogunate came to an end. The government centralised around the emperor was created to resist invasion by other countries.

The Meiji government abolished the feudal system of the Edo period and quickly reformed the judicial system. The main reason was to avoid external disadvantages: namely, unjust judgements on Japanese people under extraterritorial jurisdiction. Along with the training of legal professionals, the training of medico-legal experts also became an urgent issue. With the reformation of the legal system, modern medical education, including forensic medicine, was launched [2, 4].

In 1869, the educational system was reformed quickly; the medical school that had been controlled under the Tokugawa shogunate came under the jurisdiction of the Meiji government, and it was renamed Daigaku-Toko (the Eastern College of the University: the predecessor of the Faculty of Medicine, the University of Tokyo), in which German medical education was adopted in 1870. The following year, a German army surgeon major, B. C. L. Müller, and a lieutenant surgeon in the German navy, T. E. Hoffmann, were invited to teach at the college [2, 17].

### **Career of Kuniyoshi Katayama**

Katayama was born in 1855 during the last days of the Tokugawa Shogunate and enrolled in the Eastern College of the University at the age of 17. In 1873, W. Doenitz began to teach about autopsy at the Court Medicine School. He made significant contributions to the developing field of anatomy in Japan, as well as the fields of histology, embryology, neurology and **forensic** medicine [2, 12]. In 1877, Tokyo Daigaku (the University of Tokyo) was founded, and Ernst Tiegel lectured there on **legal** medicine to judicial officials while teaching physiology. At that time, Katayama, who was a fifth-year medical student, was in charge of translating German to Japanese. Katayama graduated from the school in 1879 and became an assistant to Tiegel in the department of physiology. In 1881, Katayama became an associate professor and began to lecture on **legal** medicine and hygiene, and in 1882, he wrote *Elements of Law Court Medicine* under the guidance of German professors (published in 1888; Fig. 2). Also in 1882, the Criminal Code (the so-called Old Criminal Code) was enacted after numerous amendments with reference to Western laws. However, this law contained remnants of feudalism [2, 5].

In 1884, Katayama was ordered to study **forensic** medicine in Germany and Austria. At first, he visited Berlin to become a **medico-legal expert** under the supervision of Carl Liman, the director of Praktische Unterrichtsanstalt für Staatsarzneikunde (Practice-Oriented School of Public Health and Medicine); then he moved to the University of Vienna and was taught by Eduard von **Hofmann** for 2 years, after which he returned to Berlin [2, 3].

**It is said that not only Katayama but also other students at that time (1880s) had been already provided sufficient education in German language and Western medicine by German teachers according to the strict and systematic curriculum in Japan; thus, it was possible to engage in research in their respective specialised fields immediately after arriving in Germany [1].**

In 1886, the name ‘Tokyo Daigaku’ was changed to ‘Tokyo Teikoku Daigaku’ (Tokyo Imperial University). Katayama returned home in 1888 and was appointed as a professor at this school. He lectured on **forensic** medicine and began to advocate Staatsarzneikunde (state medicine), which comprised legal medicine as well as health police, hygiene and jurisprudence in Germany [3, 19], for the first time in Japan. The Code of Criminal Procedure was enacted in

1890, establishing execution procedures for people with mental illness.

Katayama thought it necessary to enlarge and revise *Elements of Law Court Medicine* after studying abroad; accordingly, he published *Elements of Forensic Medicine* (in three volumes) with Noboru Eguchi et al. (Fig. 3). In 1891, the Department of Law Court Medicine was renamed the Department of Forensic Medicine. Katayama founded the National Medical Association of Japan and published the *Journal of the National Medical Society* to promote the ideals of Staatsarzneikunde.

In the early days of Tokyo Imperial University, Katayama asserted that criminal law should be partially revised and that results of psychiatric tests should be considered more seriously in criminal trials. He strove for the forensic training of not only anatomists but also psychiatrists and the forensic education of third-year students at the Faculty of Law. He published the paper 'Private Opinion on the Revision of the Criminal Code' (1899), in which he pointed out various deficiencies in the Criminal Code and proposed appropriate definitions of physical and mental disorders from a medical point of view [11]. Some provisions to the code were later amended according to his recommendations. During that time, however, he had many critical discussions with judicial authorities. He was aware of the necessity of establishing a legal system as a prerequisite for forensic medicine. In addition, Katayama translated the famous textbook of his former teacher Eduard von Hofmann, *Lehrbuch der Gerichtlichen Medicin (Textbook on Forensic Medicine)*, into Japanese (1900). He was deeply indebted to Hofmann for his education in forensic medicine [2, 15].

By this time, the Japanese government had succeeded in abolishing extritoriality imposed by England and other countries, and it promulgated the Constitution of the Empire of Japan (1889), the current Criminal Code (1907), the Civil Code (1896), the Medical Practitioner's Act (1906) and other legal codes, thereby establishing Japan as a modern constitutional nation [20].

Under these updated conditions, Katayama published *The Latest Lecture on Forensic Medicine: General Theory* at the age of 53 (1908) (Fig. 5). He also taught forensic medicine at a naval medical school in later years.

He produced many distinguished medico-legal experts from among his former pupils. Many Japanese researchers, succeeding Katayama's academic spirit, have associated with the Deutsche Gesellschaft für Rechtsmedizin (German Society of Legal Medicine) to contribute to the developments of forensic medicine. The relationship of mutual exchanges has continued to exist in the present [16].

The development of Katayama's thoughts on forensic medicine is examined in the following sections. Translations of the tables of contents of his three original texts into English are provided.

Development of Katayama's thoughts in forensic medicine

*Elements of Law Court Medicine*, written before Katayama's study in Germany and Austria [Fig. 2]

The table of contents for this book appears in Table.1.

**Table 1**

*Elements of Law Court Medicine* (copyrighted in 1882, published in 1888): Table of contents (English translation)

Part One: General Division
Chapter 1: Introduction
1. What is law court medicine
2. The character of law court medicine
3. The relation between law and law court medicine
Chapter 2: Outline of law that all doctors should know
Chapter 3: Examination and expertise in law court medicine
1. Object examination
2. Examination record
3. How to write expertise
Part Two: Special division of examination of the living body
Chapter 4: Intercourse and reproduction
Chapter 5: Obscenity and adultery
Chapter 6: Pregnancy
Chapter 7: Childbirth
Chapter 8: Nonlethal beating wounds
Chapter 9: Malingering
Chapter 10: Psychosis

This book is presumed to have been based on Tiegel's lectures on legal medicine. Although the table of contents differs in part from Tiegel's lectures, the content does not differ significantly [13, 14]. Katayama stated that he referred to some forensic textbooks by J. L. Casper and C. Liman and by E. von Hofmann, as well as a book about autopsy by R. Virchow. The explanation of laws in Chapter 2 was very brief because the legal system was still under development in Japan [8].

*Elements of Forensic Medicine*, written after Katayama's return to Japan [ Fig. 3]

The table of contents for this book appears in Table. 2.

**Table 2**

*Elements of Forensic Medicine* (1891–1897): Table of contents (English translation)

Vol. 1

General division

Chapter 1: Introduction

Chapter 2: Two kinds of application of forensic medicine

Chapter 3: The relation between law and forensic medicine

Chapter 4: Laws and regulations that all doctors should know

1. Criminal Code

2. Evidence on Civil Code

3. Code of civil procedure

4. Civil Procedure Cost Acts

5. Code of criminal procedure

6. Supplementary provision of Criminal Code

7. Post-mortem Examination Act

Chapter 5: Forensic examination and expertise

Special division

Chapter 6: Intercourse and reproduction

Chapter 7: Obscenity and adultery

Chapter 8: Pregnancy

Chapter 9: Childbirth

Chapter 10: Beating wounds

Chapter 11: Bloodstain inspection

Chapter 12: Hair inspection

Chapter 13: Phenomena of the corpse

Chapter 14: Identification of the corpse

Vol. 2

Chapter 15: Asphyxiation

Chapter 16: Starvation

Chapter 17: Death due to heat

Chapter 18: Death due to cold

Chapter 19: Toxicology

Chapter 20: Infanticide

Chapter 21: Malingering

Vol. 3



This book is a greatly enlarged and revised version of *Elements of Law Court Medicine*. In writing this book, Katayama was conscious of the difference between German and Austrian laws and Japanese laws, especially with regard to Austrian law, *Preußisches* Regulativ für das Verfahren der Gerichtsarzte bei *den* gerichtlichen Untersuchungen *menschlicher* Leichen, and he insisted that Japan should have its own programme of forensic medicine, with German and Austrian Staatsarzneikunde as a model [8].

He replaced the word ‘*law court* medicine’ with ‘forensic medicine’ as shown in Fig. 4 (English translation: Table 3), which was related not only to trial but also to legislative issues [12]. Table 3 shows that Staatsarzneikunde contains public health and forensic medicine, being contrasted to private medicine, and Katayama also refers to Staatsarzneikunde as public medicine [8]. He attached great importance to the health of the Japanese people; to some extent, this was also related to the policy of nation’s wealth and military strength of that time [6].

*The Latest Lecture on Forensic Medicine: General Theory* [Fig. 5]

The table of contents for this book appears in Table 4.

**Table 4**

*The Latest Lecture on Forensic Medicine: General Theory* (1908): Table of contents (English translation)

General Division

Chapter 1

1. Definition of forensic medicine
2. Explanation of the definition
3. The role of forensic medicine in the field of medicine
4. How to teach forensic medicine to medical scientists and jurists

Chapter 2: Doctor’s rights and obligations

1. Doctor’s rights
2. Doctor’s confidentiality
3. Doctor’s obligations on public law
4. Witness
5. Expert witness
6. Document forgery, false testimony (perjury) and false expertise

Chapter 3: Forensic examination and expertise

1. Examination of the living body

2. Examination of the dead body
3. Object examination and investigation of scene
4. Report of examinations
5. Expertise

#### Chapter 4: Classification of forensic medicine

##### Special division

#### Chapter 1: Mental state

1. Psychology and psychopathology
2. Various mental disorders
3. Mental states of offender and delinquent
4. Mental state of the person who committed suicide
5. Mental states of incompetent and witness

#### Chapter 2: Physical condition

6. Gender relation and child
7. Physical wound and death
8. Constitution and death from injury or disease

#### Chapter 3: Method of examination

9. Examination of mental state
10. Identification of the human body
11. Examination and phenomena of a corpse
12. Examination of objects and sites

#### Chapter 4: Prevention and relief

13. Prevention and relief

Katayama believed that the legal system had a double structure, public law and private law, and he tried to convey to his students an understanding of the rights and obligations of doctors systematically. Katayama said, ‘Forensic medicine is a discipline that aims to achieve the spirit of law in a harmonious manner, based on basic medical sciences and the two major applied medicines, i.e., clinical medicine and hygiene’ (Table 5) [9, 10]. In this third book, he particularly emphasised the necessity of forensic medicine education for doctors in every field and also provided guidelines for preventing medical malpractice.

### Conclusion

After examining the three books, we infer the following: In *Elements of Law Court Medicine*, written before he studied abroad, Katayama learned about German legal medicine under the

guidance of Tiegel. After returning to Japan, he had imbued the philosophy of Staatsarzneikunde and reconceptualised the field of law court medicine as forensic medicine. *Elements of Forensic Medicine* followed the basic structure of forensic medicine in Germany and Austria, but at the same time, Katayama argued that Japan should formulate its own forensic medicine to conform to Japan's legal system. He also studied legislative issues, although he faced some conflicts with the judicial authorities, and he also worked hard to revise the Criminal Code from the standpoint of a doctor. In *The Latest Lecture on Forensic Medicine: General Theory*, published years later, he argued that forensic medicine as the core of Staatsarzneikunde is necessary for all fields of medicine, and he had a systematic vision of medical jurisprudence.

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