# Past, Present, and Future of the Neurolaw: Unsolved Problems of Neurolaw

Masatoshi Kokubo Interfaculty Initiative in Information Studies, The University of Tokyo

URL: https://www.u-tokyo.ac.jp/focus/en/people/k0001\_05697.html

E-mail: m-kokubo@iii.u-tokyo.ac.jp masa.row.5050@gmail.com



#### **Abstract:**

Various scientific findings from fundamental neuroscience and cognitive science research are currently being fructified as "neurotech," and many technology companies and biobenchers are rapidly accelerating their attempts at social implementation. In this report, we will focus on the fact that Brain-Computer Interface (BCI) or Brain-Machine Interface (BMI) technology is at the core of neuroscience technology, collectively referred to as "neurotech," and give a brief overview of the society that BCI/BMI aims to achieve, as well as its potential and risks.

Given the potential and risks of BCI/BMI, the need for technology governance is now being recognized internationally. Discussions on ELSI related to neurotechnology are taking place in various international organizations and frameworks, including UNESCO, UNICEF, UN Human Rights Council, OECD, and IEEE. They are also making recommendations and proposals for normative control.

Behind these international trends, we can find the accumulation of discussions that have taken place in neuroethics and neurolaw. Moreover, the current focus of academic and political debates can be understood in terms of two main trends: "neurorights" and "cognitive liberty." In this paper, I will focus on neurolaw and attempt to describe the current state of neurolaw by briefly reviewing both the past and present of the debate.

Finally, I will conclude by identifying what "unsolved problems" remain to make the normative governance of neurotechnology meaningful and effective in the future and what is needed to solve them.

## **Biographical information:**

Masatoshi Kokubo is an assistant professor at The University of Tokyo, Interfaculty Initiative in Information Studies. He writes on freedom of thought, mental privacy, and cognitive liberty. His research has explored how modern neuroscience and neuroscience technologies raise challenges to legal theories and concepts such as freedom of thought, privacy, autonomy, free will, dignity, and so on. His recent work has explored the implications, for constitutional law, of Brain-Machine Interface (Brain Computer Interface), Neural Decoding, Neurofeedback, virtual reality (VR), AI (Artificial Intelligence), and "Cognitive Warfare." He was awarded the 13th JSPS (Japan Society for the Promotion of Science) Ikushi Prize in 2023.

### **Present and Recent Positions:**

April, 2024 - Present

- Assistant Professor, The University of Tokyo, Interfaculty Initiative in Information Studies
- Visiting Researcher, Keio University, Keio Global Research Institute

December, 2019 - March, 2024

Researcher, Keio University, the Graduate School of Law

October, 2019 - March, 2024

Staff, Keio University, Keio Global Research Institute

May, 2018 - March, 2023

Research Assistant, Keio University, Leading Program

April, 2020 - March, 2022

Researcher, National Diet Library, Research and Legislative Reference Bureau

#### **Education:**

April, 2021 - March, 2024

Keio University, Graduate School of Law Doctoral Course (Major: Public Law)

April, 2020 - March, 2021

Keio University, Graduate School of Science and Technology, Tokyo, Japan

- Degree: Master of Science (Major: Integrated Design Engineering)

# April, 2018 - March, 2020

Keio University, Graduate School of Law, Tokyo, Japan

- Degree: Master of Law (L.L.M) (Major: Public Law)

# April, 2014 - March, 2018

Keio University, Faculty of Law, Tokyo, Japan

- Degree: B.A. (Major: Constitutional Law (Japan); Minor: American Culture)

#### Awards:

- The 13th JSPS (Japan Society for the Promotion of Science) Ikushi Prize
- 2022th Science and Technology Studies Kakiuchi Yoshinobu Memorial Award

## **Publications:**

https://researchmap.jp/masatoshi\_kokubo?lang=en