16-17 December 2024
Block D Grand Hall
Kadir Has University, Istanbul



Neurotechnologies from a Multidisciplinary Perspective

Neuroscience, Law, Psychology, and Beyond

Conference Series # IV

The event will be held in English, with simultaneous translation into Turkish.

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KADİR HAS 1997 ÜNİVERSİTESİ

Neuroscience, Law, Psychology, and Beyond (Conference Series # IV):

Neurotechnologies from a Multidisciplinary Perspective

Istanbul, Kadir Has University, December 16-17, 2024

THE TERM neurotechnologies denotes a wide range of devices and systems that interact with the nervous system by either recording or interfering with neural activity. These technologies have been in use for decades in medicine for diagnostic and therapeutic purposes. The arms industry is another sector with a longstanding interest in neurotechnologies. Recent advances, however, have shown that neurotechnologies possess the potential to become assets in various domains of social life, suggesting their presence will likely extend beyond specific sectors.

FIRSTLY, these technologies hold immense promise for enhancing human capabilities, both physically and cognitively. Scientific and commercial efforts to make neurotechnologies available for enhancement are regularly intensifying. Such a trend may lead to a future where the meaning of being 'normal' changes because of the widespread use of neurotechnologies. On the other hand, there is a growing concern that neurotechnologies could be used to monitor and manipulate brain activity. These concerns were first expressed as early as the end of the 1960s, but back then, the debate was based more on hypothetical claims and popular beliefs than solid scientific findings. Nowadays, however, we witness intense scientific research exploring neurotechnologies' capacities for "mood reading" (though not yet "mind reading") and for manipulating social behavior. Thus, there are now more solid grounds to fear that neurotechnologies may threaten a social order built on democratic principles.

SHOULD we consider the prospect of neurotechnologies being used massively a threat or a blessing for human social organization? This conference aims to serve as a platform for multidisciplinary dialogue by opening the floor for a debate over the positive and negative aspects of neurotechnologies. The list of topics that specialists will address in various panels and keynote speeches is as follows:

- **Neurotechnologies and Human Agency:** What is the potential of neurotechnologies to change the way humans perceive their own identity?
- **Neurotechnologies and Law:** What challenges do developments in neurotechnologies pose for legal systems?
- **Neurotechnologies and Diseases/Disabilities:** What is the potential of neurotechnologies to overcome nervous system impairments, disabilities, and neurological diseases?
- **Neurotechnologies and Ethics:** Are ethical principles and the concept of human dignity facing an unprecedented threat because of advances in neurotechnologies?

Organizing Committee:
Prof. Dr. Ozan Erözden, Prof Dr. Aslı Demirtaş Tatlıdede, Ece Uyanık, Dr. Doğukan Bingöl

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Day 1
December 16

9.30 Opening remarks

10.00 – 11.00 Keynote Lecture
Moderator: Aslı Demirtaş Tatlıdede (Bahçeşehir Un.)

Joan Camprodon-Gimenez (Massachusetts General Hospital / Harvard Medical School)
Neurotechnology and Precision Brain Medicine: Moving the Focus From Populations to Individuals

11.00 – 11.15 Coffee Break

11.15 – 13.00 1st Panel: Neurotechnologies and Human Agency
Moderator: Başar Bilgiç (Istanbul Un.)

İnci Ayhan (Boğaziçi Un.)
Virtual Reality, Avatars and Self-Agency

Eylem Canaslan (Kırklareli Un.)
Relational Autonomy and Human Agency

Aslı Demirtaş Tatlıdede (Bahçeşehir Un.)
Unveiling Sense of Agency: Insights from Noninvasive Brain Stimulation

13.00-14.00 Lunch Break

14.00 – 15.00 Keynote Lecture
Moderator: Tuğrul Katoğlu (Kadir Has Un.)

Allan McCay (Sydney Un.)
The Many Implications of Neurotechnology for Criminal Justice

15.00 – 15.30 Coffee Break

15.30 – 17.30 2nd Panel: Neurotechnologies and Law
Moderator: Sibel Çakır (Bahçeşehir Un.)

Elif Küzeci (Bilkent Un.)
Neurotechnology, Mental Data and Personal Data Protection

Harry Lambert (CNL – Center for Neurotechnology and Law) (online)
Neurotechnology, Product Liability and Personal Injury

Ozan Erözden (Kadir Has Un.)
How Private Could Brain Data Be?

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Day 2
December 17

10.00–12.30 3rd Panel: Neurotechnologies and Diseases/ Disabilities
Moderator: Hakan Gürvit (Istanbul Un.)

Emre Adıgüzel (University of Health Sciences) (online)
Life Reimagined with Neurotechnologies: The Concept of Ability Laboratory in Rehabilitation

Can Yücesoy (Boğaziçi Un.)
From Biomechanics to Neurotechnological Solutions to the Challenges that Limit Human Movement

Türker Şahiner (Memorial Şişli Hospital)
Which One Will We Prefer for Early Diagnosis of Neurodegeneration? Digital or Biological Biomarkers?

Hakan Karaş (İstanbul Gelişim Un.)
Digital and Online Connectivity in Psychotherapy

12.30–13.30 Lunch Break

13.30–16.00 4th Panel: Neurotechnologies ethical aspects
Moderator: Müjde Peker (MEF Un.)

José M. Muñoz (International Center for Neuroscience and Ethics, Spain) (online)
Enforcing Freedom of Thought and Neurorights: The Habeas Cogitationem Writ

Albert Ali Salah (Utrecht Un.)
Computer Analysis of Human Behavior: Ethical and Legal Issues

Robert Booth (Sabancı Un.)
Can 'Mood Reading', or Emotion Recognition Technologies, Ever Be Possible? A Counter-Argument

Lütfü Hanoğlu (Istanbul Medipol Un.)
Neuromodulation and Ethics

16.00–16.30 Coffee Break

16.30–18.00 Keynote Lecture
Moderator: Ozan Erözden (Kadir Has Un.)

Güven Güzeldere (Harvard Un.) (online)
New Paradigm of Artificial Intelligence and The Law

18.00 Closure