Why are Neuro-rights important: Data economy and the privacy laws in South Korea

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Hypothetical Scenario

Imagine that you are living in an age where autonomous vehicle technology is highly advanced.

Cars contain numerous cameras and sensors. These days, kids don’t know what it means for a person to get hit by a car and die as a result of it. When you get in the car, it scans your body temperature, pulse, and brain waves to control air conditioning and play music. Once the destination is set with the thought input device, Brain-Machine Interface, it automatically explores and moves to the optimal path. These features are almost standardized and included in all cars.

The price of a car varies depending on the amount of collected user data and mandatory commercial advertisement views. Now that ‘advertisement blocked’ products are more expensive, ordinary people mainly use cars with a lot of advertisements. Moreover, if you approve the linkage of car user data sets with other life data such as sleep data and exercise data, you can also reduce the time spent watching advertisements a little. In addition, a car that visits a specific store exposed in the ads at least 10 times a month is provided free of charge.
Neurotechnology has a great potential for generating profitable behavioral data. In particular, the brain-machine interface could be a powerful tool to infer one’s mind, preferences, propensity, emotion, etc.

- Do we have safeguards to protect individuals in the neural data markets?
- What are human rights at risk in the age of convergence of data economy and neurotechnology?
Privacy laws in Korea

- **Constitution**
  - Article 10(1) The right to human dignity and the pursuit of happiness
  - Article 17 The right to privacy was enacted in 1980
  - Article 37(1) Freedoms and rights of citizens shall not be neglected on the grounds that they are not enumerated in the Constitution

- **Judicial precedents**
  - The right to personality and self-determination are derived from article 10
  - The right to self-determination of personal information is derived from article 10, 17, and 37(1)
Privacy laws in Korea

- Personal Information Protection Act (PIPA)
  - Enacted in 2011
  - Major amendment in 2020

- Limitations to processing of
  - Sensitive information
  - Personally identifiable information

- Special cases
  - for statistical purposes, scientific research and preservation of records for public interest

- PIPA not applicable
Privacy laws in Korea

What PIPA provisions are applicable to neural data?

1. Personal information?
   • Data subject identifiability?

2. Is this sensitive personal information?
   • Medical information?
   • Biometric information?

It depends on the situation.

Even if PIPA applies to neural data, PIPA covers only partial aspects of issues concerning data processing.
The notion of personality rights

• Before the 20th century, the notion of personality rights, the idea that humans can be the subject and object of rights at the same time, was regarded as a contradictory and inhumane concept.

• Currently, legal systems have been adapting to social changes that stem from technical changes.
The notion of personality rights

Elements or markers of individual personality

In the age of neurotechnology

Name
Reputation
Portraits, etc

Rights

In the age of media technology

Neuronal state or activities

Rights
The neuro-rights in South Korea

Neuro-privacy
Cognitive Liberty
Mental Integrity
Psychological continuity

Brain privacy
Mind privacy
Mental privacy

뇌신경권
Neuro-rights
Comprehensive legal status of the subject related to the neuronal state or activities
The neuro-rights in South Korea

Why neuro-rights?

- Emphasis on issues stemming from neurotechnology
  - The more concrete realization of human dignity and values in relation to neurological conditions through the principles of self-determination, self-responsibility, and self-control.
  - Various concerns need to be addressed beyond the personal information issues.
- Rights at the national and international level
  - Neuro-rights could be recognized as human rights as well.
  - Both international and national level of perception is needed considering neurotechnology is getting penetrating daily lives in various ways.
Thank you