Extended Personhood and Brain–Computer Interfaces

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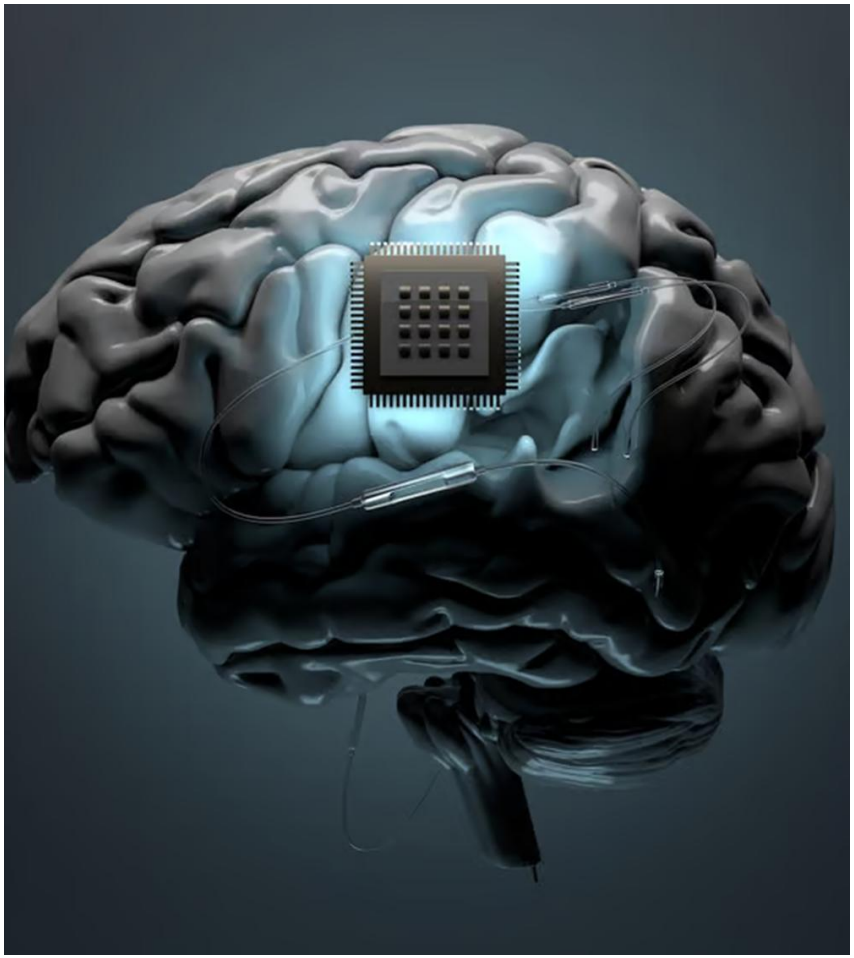
Politics of Technologies in the Digital Age III — Neurons and Machines
Ioannina 2025

Introduction

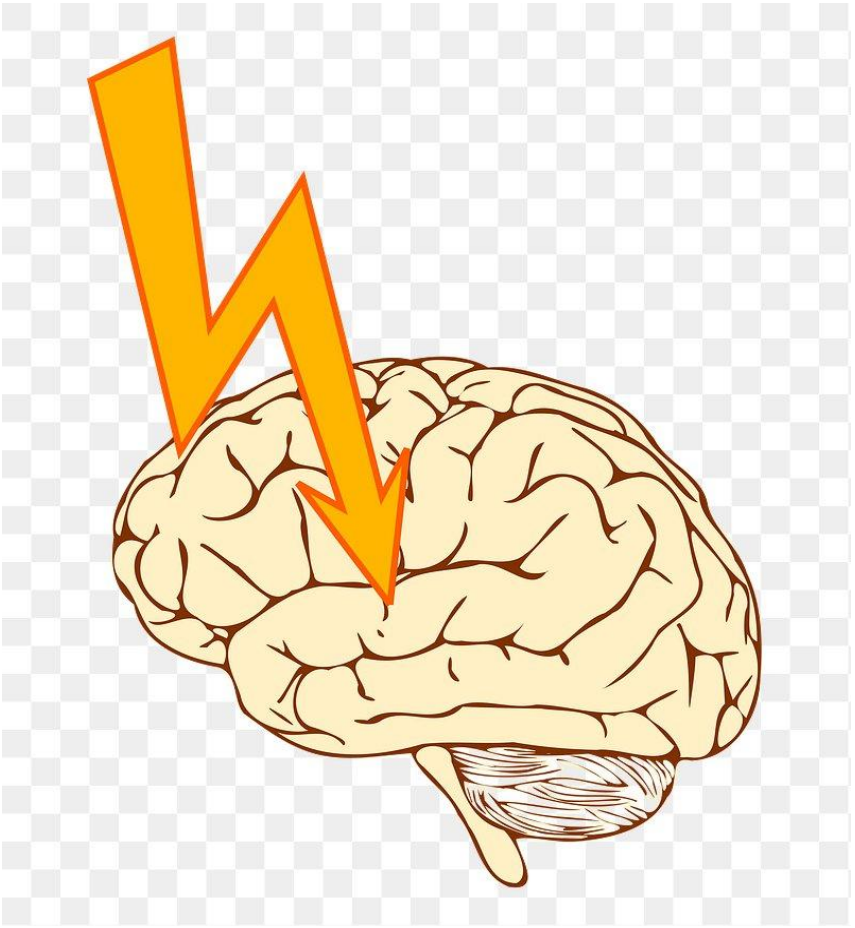
- Can personhood extend beyond biological boundaries?
- Examined through BCIs, extended mind thesis, and lived experience.
- Case study: Patient R.



Patient R Case

Patient R Background

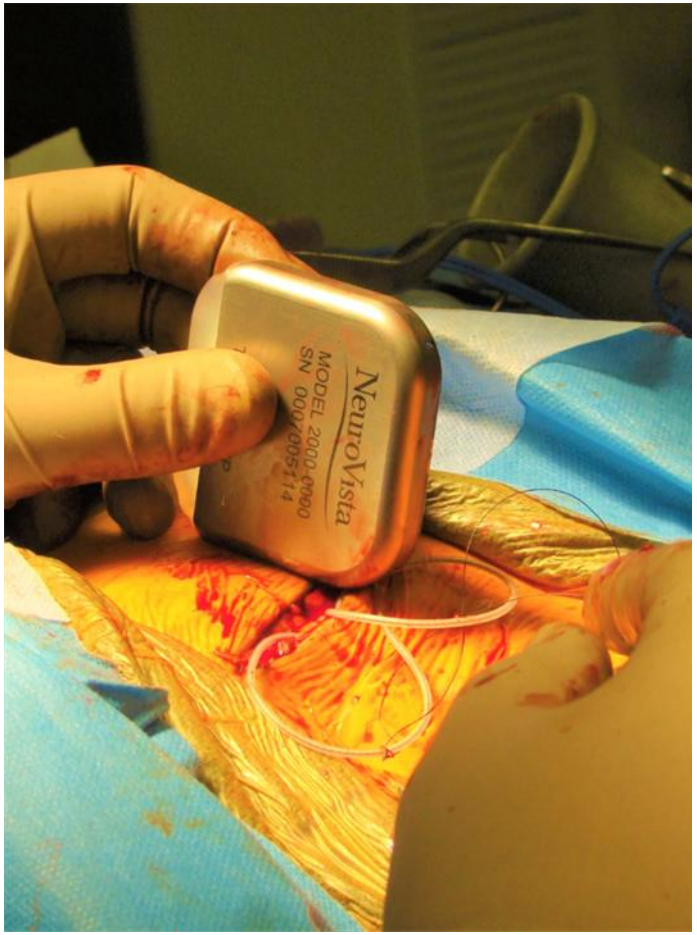
- Diagnosed with epilepsy at age 3
- Decades of ineffective treatments
- Severe impact on autonomy, daily functioning, identity
- Experimental advisory BCI implanted
- Device later removed against her will



BCIs and personhood

The NeuroVista Implant

- Semi-invasive advisory BCI
- AI algorithms predict seizures
- Seizure reduction: from several per month to none
- Established functional coupling with patient



Personhood

- Distinction: personhood vs personal identity
- Necessary feature: embodiment
- Sufficient aspects: memory, narrative identity, character, intentions, self-awareness, agency

Personal Identity

- Metaphysical question of persistence
- Biological, psychological, narrative theories
- Narrative identity central to self-understanding

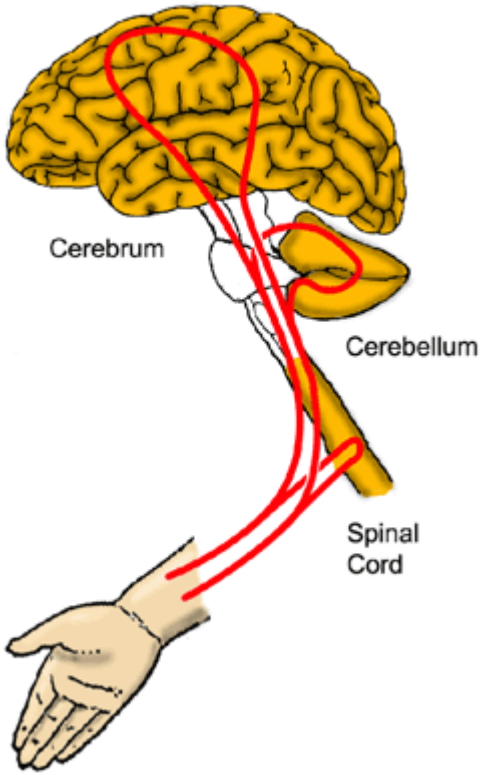
Extended mind thesis and Extended personhood

Extended Mind

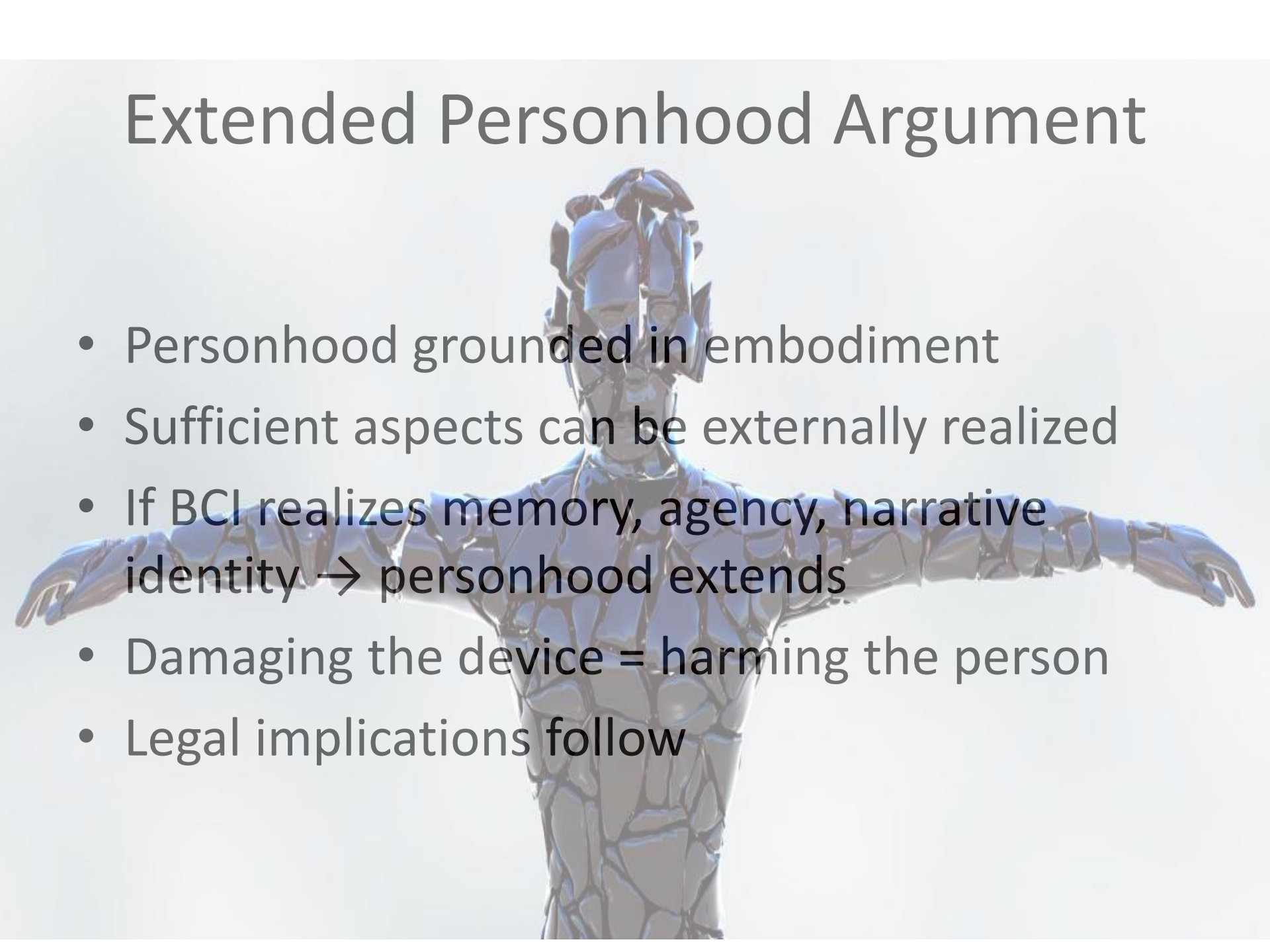
- Clark & Chalmers: active externalism
- Mind can extend beyond skull
- Cognitive systems may include artifacts
- Parity principle: external process = cognitive if same function

Cognitive Extension Conditions

- Not all cognitive extension = personhood extension
- Palermos: genuine extension requires ongoing feedback loops
- Bidirectional interactions agent–artifact
- Artifact becomes part of cognitive system



Extended Personhood Argument

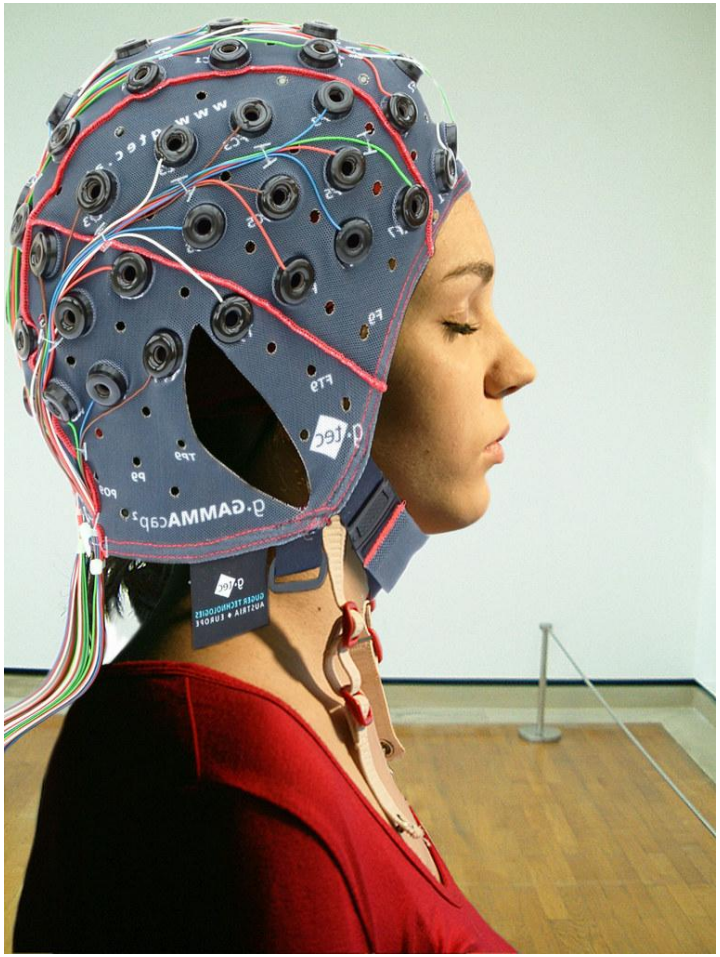


- Personhood grounded in embodiment
- Sufficient aspects can be externally realized
- If BCI realizes memory, agency, narrative identity → personhood extends
- Damaging the device = harming the person
- Legal implications follow

Patient R before and after BCI removal

Patient R: Before Removal

- Adjustment & embodiment of device
- Empowerment & increased agency
- BCI integrated with her sense of self
- Constructed positive, confident self-narrative



Symbiotic Agency

- ‘Symbiotic agent’ emerging (Gilbert & Ienca, 2023)
- Mutual augmentation of capacities
- Improved decision-making
- Sense of safety, independence, control

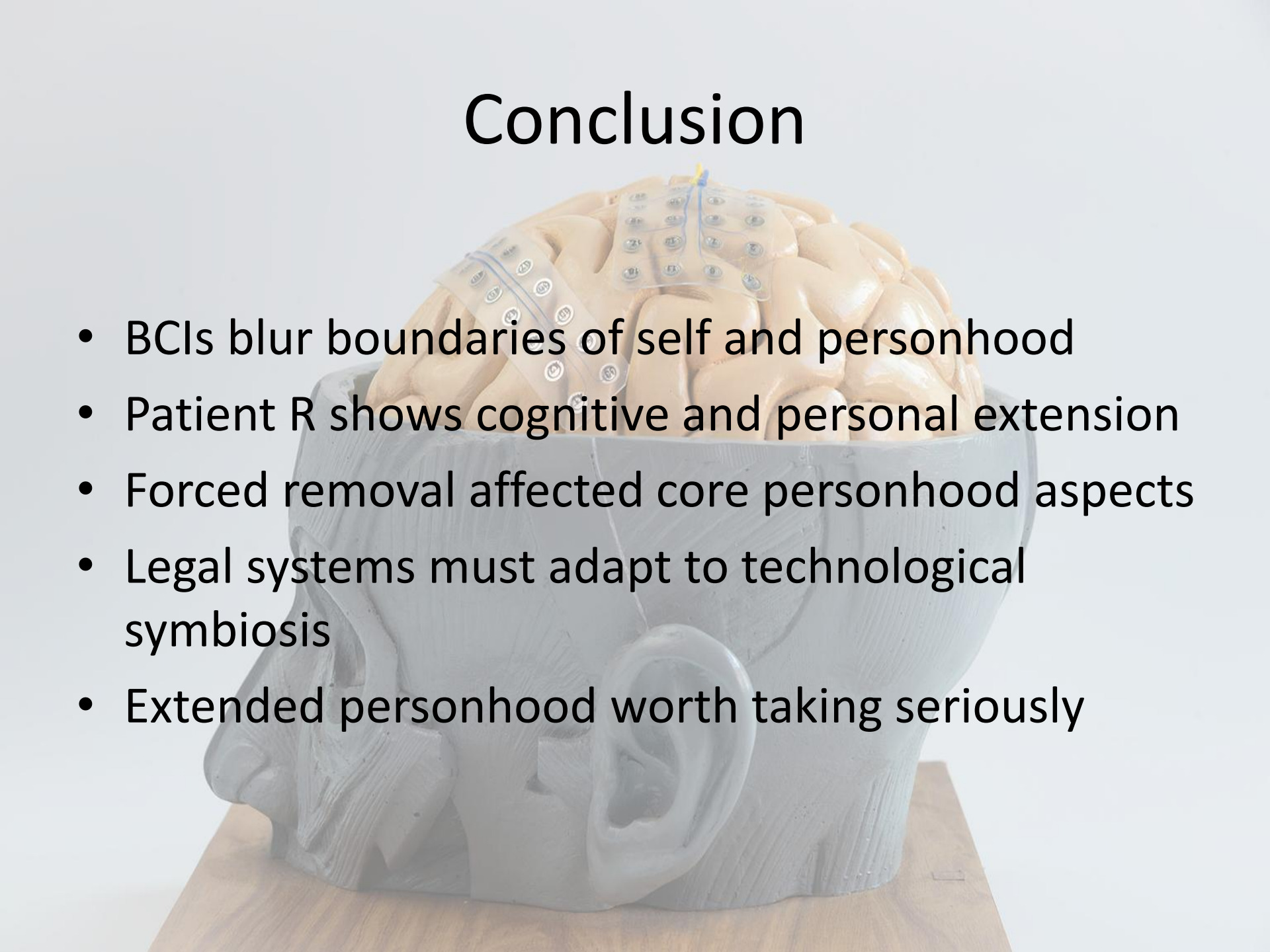
Patient R: After Removal

- Resistance to explantation
- Feelings of loss & stolen identity
- Cognitive and psychological uncertainty
- Disruption of narrative identity
- Profound grief

Impact on Personhood

- Removal harmed embodied agency
- Self-awareness destabilized
- Narrative identity fractured
- Moral autonomy diminished
- BCI functioned as part of her personhood

Conclusion



- BCIs blur boundaries of self and personhood
- Patient R shows cognitive and personal extension
- Forced removal affected core personhood aspects
- Legal systems must adapt to technological symbiosis
- Extended personhood worth taking seriously

ACKNOWLEDGMENTS

PHILOSOPHY DEPARTMENT
School of Philosophy
University of Ioannina

UNIVERSITY of IOANNINA

FORTH
INSTITUTE OF ELECTRONIC STRUCTURE AND LASER

APPROACH
APPROACH receives funding from the European Commission's Horizon Europe Research Programme under Grant Agreement Number 101120397

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