Mental privacy, self-expression, and hermeneutical injustice

Introduction

- There has been marked improvement in neurotechnological methods of decoding mental states
- Interest in non-therapeutic applications (e.g., cognitive enhancement, entertainment)
- Such interest has informed calls for neurorights, including mental privacy (MP)
- Use of neurotechnological attention monitoring by companies across the world already¹

Case Study

- Electroencephalography (EEG) headbands in the classroom^{2,3}
- Attention monitoring to improve academic performance
- Trialed on 10,000 schoolchildren in China aged 10-17 (as of Jan 19, 2019)

Existing Accounts of MP

Control Theories⁴⁻⁶

- MP about autonomous governance of ourselves and information about us
- Problems:
 - Won't work for non-autonomous minors
 - Unclear scope and strength
 - Lack of substantive grounds for making autonomous decisions

Contextual Integrity⁷

- Appropriateness of flows of information is context-specific, dependent on social norms
- Norms in turn depend on "the values, ends, and purposes of the social contexts in which we find them."⁸
- Problems:
 - Seems to imply deep relativism
 - \circ Not intended for normative analysis



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- What is morally distinctive about **mental** privacy? • What is distinctive about **neurotechnological** threats to

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Existing accounts need supplementation to make sense of:

A New Proposal

The distinctiveness of *mental* privacy

- Ground MP in the value of self-expression
- Self-expression of what, exactly?

Distinctiveness of neurotechnological threats

- Bypass person-level behavior entirely
- Especially threatening to self-expression and self-definition

Details

- Introspection as highly interpretive, even Socratic¹¹
- study)
- Self-expression as a ground of respect and irreplaceability¹²
 - Plausible as an element of our fundamental humanity

Conclusions

- Calls for legal enshrinement of mental privacy are urgent.

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References

- 1. Farahany, Nita. (2023). The Battle for Your Brain: Defending the Right to Think Freely in the Age of Neurotechnology. New York: St. Martin's Press, p. 44. 2. Ye, Yvaine. (2019, Jan 14). "Brain-reading headsets trialled on 10,000 schoolchildren in China." New Scientist. 3. Wang, Yifan, Shen Hong, and Crystal Tai. (2019, Oct 24). "China's Efforts to Lead the Way in AI Start in Its Classrooms." The Wall Street Journal. 4. Ienca, Marcello, and Roberto Andorno. (2017). "Towards new human rights in the age of neuroscience and neurotechnology." Life Sciences, Society and Policy 13(5): 1-27. 5. Yuste, Rafael, Sara Goering, Blaise Aquera y Arcas, et al. (2017). "Four ethical priorities for neurotechnologies and AI." Nature 551 (7679): 159-163. 6. Goering, Sara, Eran Klein, Laura Specker Sullivan, et al. (2021). "Recommendations for Responsible Development and Application of Neurotechnologies." Neuroethics 14(3): 365-386. 7. Susser, Daniel, and Laura Y. Cabrera. (2023). "Brain Data in Context: Are New Rights the Way to Mental and Brain Privacy?" AJOB Neuroscience 15(2): 122-133. 8. Nissenbaum, Helen. (2010). Privacy in Context: Technology, Policy, and the Integrity of Social Life. Stanford: Stanford Law Books, p. 6.
- 9. Mach, Ernst. (1886 [1914]). The Analysis of Sensations, and the Relation of the Physical to the Psychical Realm. Translated by C. M. Williams. Edited by Sydney Waterlow. Chicago and London: Open Court Publishing Company. 10. Fricker, Miranda. (2007). Epistemic Injustice: Power and the Ethics of Knowing. Oxford: Oxford University Press.
- 11. Siewert, Charles. (2011). "Socratic Introspection and the Abundance of Experience." Journal of Consciousness Studies 18(1): 63-91. 12. Siewert, Charles. (2021). "Consciousness: Value, Concern, Respect." Oxford Studies in Philosophy of Mind (pp. 3-40), vol. 1. Edited by Uriah Kriegel. New York: Oxford University Press

• Answer: our introspective awareness of our own mental life (see Figure 1)

• Risk of **hermeneutical injustice**¹⁰ (diminishment of our interpretive resources)

• Potential for **offloading** self-interpretation to an external device (such as EEG headbands from the case

• "Exospection" in which an external device informs us of our own subjective states risks eroding capacities for monitoring and reflectively interpreting our mental life, and expressing it to others

• There is a need for more conceptual and empirical work on digital and neurotechnological reliance.

BRAIN

INITIATIVE