

# How Direct-to-Consumer Neurotechnology Affects Identity

Muriel Leuenberger, 02.11.2022

# Direct-to-Consumer Neurotechnology

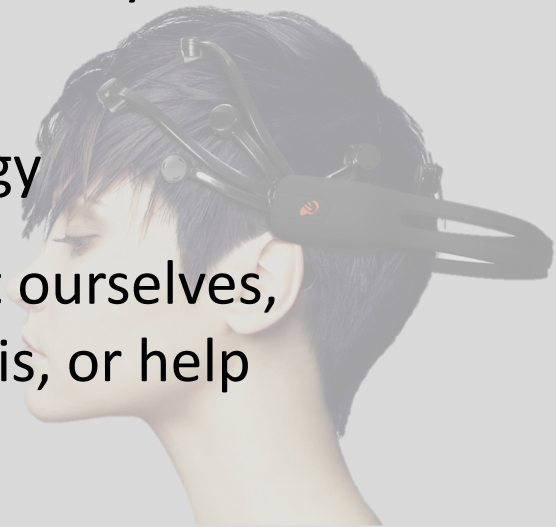
- DTC Neurotechnology claims to deliver unique insights into body and mind, read emotional states, improve sleep, focus, cognitive and athletic performance, memory, relaxation, ...
- EEGs, galvanic skin responses, GPS, electroshocks, or tDCS to record and modulate the brain



Emotiv EEG neuroheadset. S. Emotiv, "Research edition specifications," 2010.

# Direct-to-Consumer Neurotechnology

- Many of those claims are untested and likely exaggerated
- Big investments in DTC neurotechnology
- Could provide novel information about ourselves, confirm information on a neuronal basis, or help us to alter mental states



# Enrich identity construction

- Clearer and richer picture of who you are
- Improve self-interpretation
- Inform decisions
- Support self-creation projects



# Extra checks on the self-image

- Less self-deception
- Limit creative self-definition
- If inaccurate opposite effect
- DTC neurotechnology not guided by specialists



# Significant characteristics

- Change what we deem significant characteristics of a person
- «What gets measured gets managed»
- More optimization of certain parameters



# Relational identity

- Can support or undermine positions in relational negotiations of identities
- Leads to a different mode of negotiating disagreements





# Assessment of neurodata

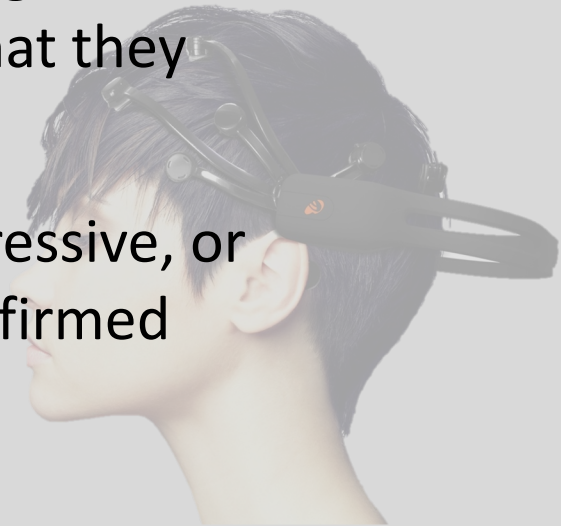
- Information is hard to assess because it is intransparent or requires expertise
- Value of information hard to grasp
- Unregulated market of DTC neurotechnology can lead to vast quality differences





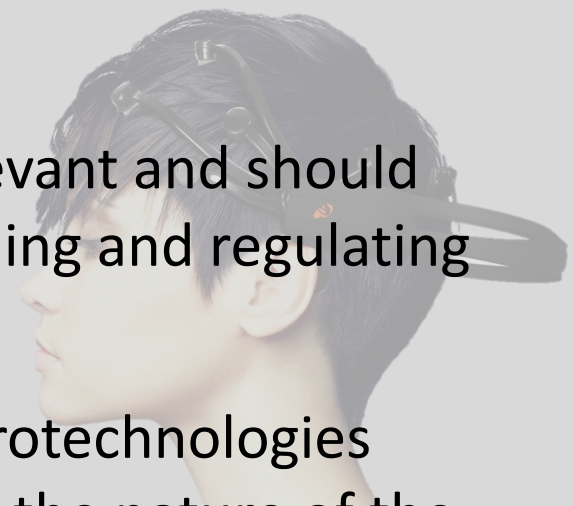
# Ingrained in the brain

- Characteristics that are perceived as ingrained in the brain can lead to the impression that they are hard to change
- Especially problematic if harmful, oppressive, or bigoted views and stereotypes are confirmed through neurodata



# Conclusion

- There is an intimate relationship between DTC neurotechnologies and identity.
- Our identity interests are ethically relevant and should be considered and protected in designing and regulating DTC neurotechnologies.
- It is important to ensure that DTS neurotechnologies provide accurate information and that the nature of the information is clearly disclosed.



# Thank you!

Contact me for questions or comments

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