

Mind Reading Neurotechnology: A Critical Examination of Neurorights Claims

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The convergence of AI and neurotechnology has ushered in a new era of brain reading, where claims abound regarding the ability to decipher human minds (Reardon 2023). In this study, we delve into the veracity of terms like “brain-reading” and “mind-reading” as they relate to current neurotechnological advancements, aiming to discern whether they carry evidence or hype.

Our investigation draws from a comprehensive scoping review of 1017 academic articles, providing insights into the state of the art. Among these scholarly works, up to 91% suggest the tantalising possibility of mind reading through brain reading. Ethical considerations loom large in this discourse, with mental privacy, mental freedom, and personhood at the forefront (Ienca Andorno 2017; Lavazza 2018).

However, our scrutiny reveals a disconcerting trend: the imprecise and inconsistent usage of the term “mind-reading” within scientific circles. This linguistic ambiguity fuels exaggerated claims in ethics about AI and/or brain-computer interfaces (BCIs) already surpassing their current capabilities or even venturing into unattainable realms. The hype surrounding AI and BCIs extends beyond mind-reading capabilities; it infiltrates the domain of neuroethics, specifically in the context of neurorights.

We identify a subset of neurorights claims grounded in hypothetical scenarios (Baselga-Garriga, Rodriguez, Yuste 2022; Yuste Genser Herrmann 2021), advocating for protective human rights in the face of AI-enabled mind reading—a category of speculative ethics claims centered around the alleged capacity of AI and neurotechnology to extract thoughts from the mind without explicit consent by strictly “reading” the brain.

This presentation aims to offer an overview, acknowledging that while imaginative scenarios derived from mind-reading neurotechnology can contribute to entertaining ethical and philosophical discussions, they can also lead to unproductive and pointless areas of research, potentially undermining neuroethical progress (Hansson 2020; Nordmann 2007; Gilbert Goddard 2014).

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