## From an extended to a relational interpretation of the right to mental integrity

The emergence of 'pervasive neurotechnologies' used for neuroimaging (EEG and fMRI) and neuromodulation (tDCS and TMS) triggered the debate on new neural rights. Ienca and Andorno (2017) proposed the 'right to mental integrity', that protects the agents from an unauthorized direct access to and manipulation of their neural signaling which results in physical or psychological harm. Their proposal is essentially neurocentric since it focuses on the preservation and protection of neural computation (§ 1).

Within the debate on the link between 4E cognition and mental health, several authors highlight that it is wrong to reduce the preservation of mental integrity to the protection of the neural domain. Proponents of the extended mind theory (EXT) argue that the devices highly integrated to neural processes should count as constitutive parts of the agents' minds, thus eventually deserving the same moral status and degree of protection of the brain (Farina and Lavazza 2022). The acceptance of EXT might imply the reformulation of a 'right to mental integrity' in order to protect agents from 'extended personal assault' (Carter and Palermos 2016) (§ 2).

Instead, we argue that EXT does not have a substantive moral content per se and when it does it implicitly relies on a flawed conception of moral status (Cassinadri 2022) and on the agential bias (Reader 2007), namely an individualist account of agency and personhood. Thus, we propose an alternative reformulation of the right to mental integrity, which is neither neurocentric, nor affected by the agential bias, by grounding it on a relational view of the self and a comprehensive reshaping of the linkage between autonomy and vulnerability (Pirni et al. 2021). Rather than extending the boundaries of the agent we propose to acknowledge the morally relevant dependency of the agents on external tools (Soraker 2007) (§ 3).