Emotional AI and Freedom of Thought

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We live in a world permeated with machines and algorithms that are getting better at tracking our emotional lives (McStay, 2018). Originated from the development of affective computing (Picard, 2000), the field of emotional artificial intelligence (emotional AI) has made great progress with the explosion of big data. And these technologies will only get better, given the commercial (Zuboff, 2015) and political interests (Bakir, 2020). In this essay, I list five ways emotional AI technologies interfere with our freedom of thought. Freedom of thoughts can be defined as freedom from manipulation and coercion. According to many thinkers, the right to freedom of thought is the foundation of democracy.

1) Optimal “hijacking of our attention:” The basic truth about the algorithms behind social media and other modern computational platforms is that they are optimized to hijack our attention (O’neil, 2016). What we pay attention to largely determines what we think, what we feel, how we feel about things. Thus, manipulating our attention is an infringement of our right to freedom of thoughts and freedom of choice.

2) Interfering with our emotions is interfering with our counterfactual reasoning: Our emotions play a very important role in helping us to reason through all the counterfactuals (Pearl,

2019, Vuong et al., 2020), which I think is essential to our freedom of thoughts and freedom of choice.

3) *The networked nature of these platforms means certain emotions are quickly amplified and spread.* It seems that fear, anxiety, and outrage spread quickly on social media (Crocket, 2017; Rice, 2020). In a climate of fear, anxiety, and outrage, it will be harder to think for yourself, to say what you think. In a climate of fear, anxiety, and outrage, it is harder to go against our preconceived models of the world, to dispassionately evaluate new ideas. Moreover, the networked nature of these platforms lead o

4) *A more sophisticated form of a society of control:* The harvesting of non-conscious data on emotions and using it to manipulate human behaviors seem to be aligned with the mechanisms of Deleuze's society of control (Deleuze, 1992). In a society of control, people lose their individuality and become self-policing cogs in a machine.

5) *The concerns over the inaccuracy and bias in emotional AI:* Most emotional AI algorithms seem to be designed with the underlying Paul Ekman's Universal Emotion Hypothesis (Ekman, 1999). This hypothesis has been challenged intensely with new empirical results from cognitive science (Gendron, Crivelli & Barrett, 2018; Barrett, 2017; Barrett et al., 2019). Inaccurate and biased tracking of our emotions can lead to mistaken decision-making.

These issues raise the importance of discussing legal and socio-cultural institutions to govern emotional AI technologies' growing influence on psychology. As all of these technologies originate from academic research, it is important for the academic community to tackle this problem head-on. Several proposals to regulate these technological developments have been proposed. For example, Brent Hecht proposed in 2018 that peer-reviewers must

ensure computer scientists to include statements on the negative societal consequences of their work (Gibney, 2018); or a proposal on stricter regulation at ethical checkpoints such as peer-reviews, journals, and conferences editors, etc. (Van Noorden, 2020). In this new intellectual terrains, ethicists, sociologists, and engineers need to work together in the spirit of openness, transparency, and humility (Vuong, 2017; 2018; 2019; 2020).

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