

To Regulate or to Be Regulated? – How to Protect the ‘Freedom of Mind’ Against Emotional AI Surveillance?*

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Introduction

While how technology changes life as we know it is a story still unfolding, the subtle but growing presence of emotional artificial intelligence (AI) surveillance in our daily lives calls for a contemplative inspection of the technology’s intrusive impact on personal autonomy and fundamental rights.

The origin of emotional AI dates back to “affective computing,” a multidisciplinary research branch introduced by Rosalind Picard in the 1990s to refer to technologies which recognize, process, and respond to human emotions (Picard 1997). Emotional AI combines the science of affective computing with AI and takes the relationship between humans and technology to a new level (McStay 2020). Through an assessment of facial expressions, biophysical and physiological measurements, voice, gestures, and words, emotional AI detects, infers from, and interacts with people’s emotional states and feelings, with or without their awareness or consent (Häuselmann et al. 2023).

In addition to its technological limitations and propensity for bias (Barker et al. 2025), which compromise the accuracy, reliability, and objectivity of performance and output (Feldman Barrett et al 2019; Häuselmann et al. 2023), emotional AI technology presents serious ethical and legal issues that go beyond privacy concerns.

Research Problem

Emotional AI surveillance systems do more than track and identify people (Häuselmann et al. 2023). Emotions are so personal and intimate parts of our identity that they could reveal sensitive information regarding one’s opinion on and

attitude towards a certain subject, exposing personal weaknesses. Once detected, such information could be used against the individual or manipulated to compel them into thinking or acting in a specific way through various choice-architecture methods or fearmongering (Susser 2019; Zuboff 2019; McStay 2020; Peter and Ho 2022; Banzon et al. 2024). By infiltrating the private space of the mind, emotional AI leaves people vulnerable to manipulation and external modification in their decision-making, even when they are conscious of such intrusion, and diminishes their agency in favor of technology.

Agency is what makes humans the masters of their own destiny through the control and governance of their own actions (Prunkl 2024). It is an integral dimension of autonomy and denotes self-endorsed action (Savolainen and Ruckenstein 2022). Emotional AI technology has the potential to trigger a paradigm shift in human agency in an inconspicuous but concrete manner that might reconstruct social structures in the long term. A shift in the agency from humans to technology through the redesign and instrumentalization of the mind and behavior of individuals would objectify humans and subvert the very notion of personal autonomy.

Personal autonomy entails not only the negative freedom of being free from others’ interference or constraints to express what one thinks and feels but also the positive right of being able to act on one’s own will and determination, which encompasses the discretion to keep personal thoughts and feelings private (Berlin 1969). Emotional AI surveillance is capable of depriving people of this discretion, limiting their control over their own emotions, thoughts, and actions. This loss of control could lead to a chilling effect in society, under which people feel compelled

to suppress their emotions and expressions to avoid any unwanted consequences (Crawford et al. 2019; Greene 2020; Gremsl and Hödl 2022; Häuselmann et al. 2023), or turn people into puppets of surveillance capitalism, whose choices and actions are shaped through online manipulation (Zuboff 2019). That would inevitably compromise freedom of thought and freedom of expression by jeopardizing the fundamental right to freely form, hold, and express thoughts, opinions, and beliefs without any intervention (Valenzuela et al. 2024; Häuselmann et al. 2023; Peter and Ho 2022).

This raises the critical question of how we can protect our “freedom of mind” against these far-reaching effects of emotional AI surveillance.

EU Regulatory Overview

While the European Union (EU) AI Act contains a few provisions on “emotion recognition systems,” which impose restrictions on particular applications of emotional AI such as uses in the areas of workplace and education (Art 5(1)(f), EU AI Act), existing EU law does not provide sufficient safeguards against the adverse risks posed by emotional AI surveillance.

The General Data Protection Regulation (GDPR), the centerpiece of the EU’s personal data protection framework, applies to “emotion data” only when it is considered “personal data” according to the definition in Article 4(1) of the GDPR. However, despite the strong connection of emotions to one’s identity, emotion data is not always regarded as personal data within the legal meaning. Even when a piece of emotion data is legally considered “personal” in a particular situation, it might still be processed unless it falls under the category of “special data” as defined under Article 9(1) of the GDPR, which is not always the case for all types of emotion data.

When it comes to human rights instruments, they offer broad and principle-based safeguards against potential implications of emotional AI surveillance on fundamental rights and autonomy, which are of limited use in practice. This legal gap opens the door to the exploitation of emotions by creating a loophole for the unregulated use of emotional AI surveillance.

Research Objective and Methodology

Against this backdrop, this research will provide a systematic discussion of how authoritarian emotional AI surveillance could violate freedom of thought and freedom of expression by eroding personal autonomy through

coercive manipulation and behavioral engineering. It will, then, analyze to what extent the relevant EU legal instruments address such risk and identify current gaps for policy attention. In light of the lack of comprehensive legal scholarship on the effects of emotional AI surveillance on fundamental rights and personal autonomy, the research aims to contribute to the literature with a legal and philosophical analysis of emotional AI with an authoritarian surveillance focus and in the context of freedom of thought and freedom of expression.

First, the research will give an introduction to emotional AI technology and its use to control people through surveillance measures, which will present a brief overview of its technicalities, potential benefits, limitations, and associated legal and ethical challenges. After this introduction and a literature review on the topic, the research will explore how emotional AI surveillance could diminish personal autonomy, with a focus on systems that are authoritarian in nature and in reference to different legal and philosophical perspectives on the concept of autonomy, and how this leads to a violation of the freedom of thought and expression. The discussion will be followed by an analysis of the EU AI Act and the GDPR in relation to the regulation of emotional AI surveillance, pointing out current shortcomings that need to be addressed.

With its unique interdisciplinary perspective that combines theory with practice and law with philosophy, the research aims to both foster academic discussion on this critical but under-discussed topic and facilitate agenda-setting towards the more effective regulation of emotional AI surveillance.

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