When Virtual Hugs Become Sexual Harassment: Conceptualizing Acceptable Forms of Mediated Touch in Extended Reality Platforms

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I. Introduction

Touch is essential to interpersonal communication and an area of growing interest in eXtended Reality (XR) research. Although headsets that reproduce mostly audiovisual stimuli dominate the market, a "complete convergence" of the mediated and non-mediated worlds requires the integration of olfactory, gustatory, and tactile senses [1]. We focus on the development of haptic stimuli and their integration into social XR platforms in the form of wearables, and on the concept of "mediated social touch," the ability to touch over distance through kinesthetic or tactile technologies [2].

This paper examines the ethical issues surrounding mediated social touch, specifically the challenges in defining acceptable and possible forms of mediated social touch in social XR platforms. This analysis primarily focuses on how commercialized touch technologies can be misappropriated to perpetrate unwelcome forms of interpersonal touch, such as unwanted sexual contact. While current literature on defining norms for behavior in virtual settings primarily focuses on the audiovisual aspects of communication, this paper draws attention to touch, a sensation that can solidify the physical and affective connection between users and their virtual environments that sounds and sights alone cannot [3] and further establishes the realm of the virtual as another legitimate form of reality.

This work explores the reasons behind the lack of societal agreement on norms around harm in mediated social touch in extended reality environments. We conduct a thematic analysis of technology-related threads on Reddit, where gamers and VR users freely express their thoughts of VR on the platform. We focus on three dominant themes that emerged, including the concept of consent, the nuaances of cultural context, and conflicting viewpoints of realness and reality. We then offer some suggestions on how stakeholders of touch technologies can develop norms around consent and acceptability of mediated touch in social XR environments. Overall, the paper questions existing understandings and norms on mediated social touch required to develop more nuanced solutions for the governance of non-verbal interpersonal communication in social XR platforms.

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II. Ethical Challenges

One aspect of this relates to consent, which is understood differently in mediated versus non-mediated social situations. The ability to create touch sensations is constrained by the hardware generating the sensation. However, how should users' consent be collected in the collection and reproduction of signals, especially in the realm of intimate touch between partners? What solutions should be deployed to protect users' privacy during the data collection process?

Another point of contention relates to the cultural norms around touch that differ by user and the fact that many XR technologies have been developed in the context of online gaming, a space that has long been criticized for normalized gender-based harassment.

The third point relates to the conflicting viewpoints stakeholders of XR technologies have on defining realness and reality in extended reality (XR), perspectives that ultimately determine the gravity and consequences of harm in immersive settings [1].

We explore questions such as: How can we detect or measure tactile engagement in XR? If there are signals related to unwanted sexual touch, what actions should the device or prototype take? If certain types of unwanted experiences happen, what protections can be offered to users to prevent further harm [3], [4]?

III. Moving Forward

This research highlights the significance of comprehending the true nature of these immersive technologies and the way they can cause harm. It also poses critical questions about identifying and measuring touch in VR experiences, the role of user consent, and devising solutions to prevent additional harm. These insights enhance our knowledge of the ethical consequences of XR and pave the way for future research in this domain. Furthermore, this research also explores the role of regulation, the potential psychological impact to users, and the future of inclusive accessibility on XR platforms by drawing from user perspectives and regulations.

References

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