Queering machines

To the Editor — Robots and AI are no longer confined to industry but can be found in healthcare, education and retail environments. However, the insertion of robots into society raises ethical, legal and societal concerns. Discrimination and bias are known to be inherent problems of many AI applications[1] and we wonder what this means for the LGBTQ+ community and whether they are considered at all in the development and use of robotics and AI.

In fact, the understanding of how machines affect the LGBTQ+ community appears largely underexplored. Only a few works in the literature address LGBTQ+ matters in the design of robots and AI. One illustrative example is a recent study that analysed several drag queens' Twitter accounts using Perspective, an AI-driven tool measuring toxicity levels of online content created by Jigsaw (a subsidiary of Alphabet)[2]. The study found that the tool flagged a significant number of drag queens' accounts as having high perceived levels of toxicity, higher than for example white supremacist accounts. Without understanding the context entirely, AI-driven content-moderation tools could hinder the free speech of marginalized communities.

If the perspectives of queer users are not considered in robot and AI development, implicit biases will persist. Moreover, queer people will remain mostly invisible, silent, powerless and unable to understand how these technologies may affect them. Users of technology produce an extensive entanglement of social constructions, relations and practices; they "consume, modify, domesticate, design, reconfigure, and resist technological development"[3]. In this sense, when framing technology within traditional heteronormativity one risks exclusion, as configuring the user as 'everybody'[4] can make technology work for the majority while dramatically excluding various minorities.

Inclusion in robotics and AI could significantly empower the LGBTQ+ community. In eldercare, LGBTQ+-inclusive robotics could help alleviate the loneliness experienced by many queer older adults. In education, they could provide support and information to children and young adults who express complicated feelings about their sexual orientation or gender identity. Holistic inclusion strategies on multiple levels from LGBTQ+ communities, as well as individuals, could ease the understanding of the challenges around discrimination and the queer community. Examples are the work of recent, noteworthy, outlier initiatives pushing for diversity in robotics and AI. These include CSIRO's Diversity & Inclusion at the Robotics and Autonomous Systems Group[5] and Queer in AI[6]. Still, more research is needed to unwrap the underlying problem of how science has overlooked and largely continues to overlook the LGBTQ+ community[7]. Diversity is about addressing the potential repercussions that biases have on society as a whole and, in particular, on underrepresented groups. In this respect, it is imperative that we construct mechanisms and policies that acknowledge the importance of inclusivity, diversity and non-discrimination for the LGBTQ+ community as well in the development and use of robots and AI. ❐

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Published online: 12 February 2020

https://doi.org/10.1038/s42256-020-0157-6

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Acknowledgements

Part of this project was funded by the LEaDing Fellows Marie Curie COFUND fellowship, a project that has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement no. 707404.

Competing interests

The authors declare no competing interests.