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Performing Robots

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Roger Andre Søråa and His Study on Robots and Gender

Roger A. Søråa is an Associate Professor of studies of technology and society within the Department of Interdisciplinary Studies of Culture. The focal point of his research revolves around the automation, robotization, the digital transformation of society, and other topics based on human-technology interactions. To understand the depth of his involvement in his field, it is necessary to highlight the concreteness of his previous studies, such as the digitalization in healthcare, the influence of automation on workplace practices, and a thorough investigation into digital advancements within Asian cultures, contextualized in Japan and Korea¹. The discovery of Søråa's studies in his field motivated this paper to start a conversation about what his contributions can tell us about the influence of modern technology, particularly robotics, on our society's perception of gender. This paper will discuss Søråa's findings around robots and gender in his articles "*Mechanical genders: how do humans gender robots*", and "*Queering the Machines*", which highlight the importance of LGBTQ+ inclusivity in technological development.

In "*Mechanical genders*", Søråa offers an in-depth analysis of the assignment of gender to robots that highlights the concept of technological identity and gender as a social construct. The discussion describes multifaceted perspectives on whether these attributions should be categorized as physical or social. For instance, renowned robots such as SoftBank's Pepper and

¹ "Roger Andre Søråa." *NTNU*, www.ntnu.edu/employees/roger.soraa.

Honda's ASIMO, designed with ambiguous gender presentations, illustrate the phenomenon of gender attribution to technological objects. SoftBank, as a seller, proclaims its neutrality in assigning gender but allows buyers to choose a male or female gender for the purchased robot. However, discrepancies arise when shopkeepers, on different occasions, attribute gender based on perceived voice characteristics or behaviors, leading to inconsistent gender assignments².

The author explains that this phenomenon represents a social concern since it allows us to reflect on our perception of gender norms and perceive its squareness. The act of assigning gender to robots perpetuates existing societal stereotypes, echoing the creators' beliefs regarding the roles these robots should embody. For instance, the robot is assigned a gender not only to its voice or shape, but to the tasks that it performs, finding association to the female gender with rather domestic labor. Søråa shows that the assignment of gender to robots is based on power structures and relations, emphasizing the significance of a direct relationship between societal gender norms and our understanding of gender in the context of robotics or other forms of technological progress. Additionally, he advocates for reevaluating the linguistic frameworks used to study gender and technology, suggesting the potential need for a new technological-gender language to suit this evolving era of robotics and AI³.

In *"Queering the Machines"*, co-authored by Søråa alongside Adam Poulsen and Eduard Fosch-Villaronga, the study illuminates the profound societal implications arising from the intersection of LGBTQ+ perspectives and the development of robotics and AI. The insertion of robots and AI into various societal domains, including healthcare, education, and retail environments, brings forth ethical, legal, and societal concerns. Discrimination and bias prevalent in many AI applications raise pertinent questions about their impact on the LGBTQ+

² *Mechanical Genders: How Do Humans Gender Robots?* - Taylor & Francis Online, www.tandfonline.com/doi/full/10.1080/09718524.2017.1385320.

³ Idem

community and the extent to which this community is considered in the development and deployment of robotics and AI⁴.

The limited exploration of how machines affect the LGBTQ+ community is evident within the existing literature. Few studies address LGBTQ+ matters in the design of robots and AI, underscoring a significant gap in understanding and consideration. One illustrative instance involves a recent study that examined multiple drag queens' Twitter accounts using Perspective, an AI-driven tool assessing the toxicity levels of online content. This analysis, utilizing technology created by Jigsaw (a subsidiary of Alphabet), revealed that the tool disproportionately flagged numerous drag queens' accounts as highly toxic, surpassing even accounts associated with white supremacist content. This lack of nuanced contextual understanding within AI-driven content moderation tools poses a risk of hindering the free speech of marginalized communities. The absence of perspectives from queer users during robot and AI development perpetuates implicit biases, rendering queer individuals largely invisible and powerless within technological landscapes⁵.

Drawing connections between these two works by Søråa, a recurring theme emerges: the entanglement of societal norms with technological advancements. Søråa's exploration of gendering robots intersects with the broader discourse on inclusivity in technology. He challenges the status quo, urging for a critical examination of societal influences embedded in technology design and implementation. This critical evaluation allows for a holistic understanding of the societal impact on technology and emphasizes the necessity of diverse perspectives in the technological sphere.

⁴ Poulsen, Adam, et al. "Queering Machines." *Nature News*, Nature Publishing Group, 12 Feb. 2020, www.nature.com/articles/s42256-020-0157-6.

⁵ Idem

In conclusion, Roger Andre Søråa's contributions to robot ethics significantly reshape the discourse on human-robot interactions. Through his articles on gendering robots and LGBTQ+ inclusivity in technology, Søråa emphasizes the need to question societal norms embedded within technological developments. His work stands as a beacon, calling for a critical examination of biases and advocating for a more inclusive and diverse approach in the design, development, and implementation of robotics and AI.

Bibliography |

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