

Institution: De Montfort University		
Unit of Assessment: 11		
Title of case study: The Ethics of Sex Robots and Harms to Women and Girls		
Period when the underpinning research was undertaken: 2014–present		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Kathleen Richardson	Professor of Ethics and Culture of Robots & AI	2014–present
Period when the claimed impact occurred: 2015–present		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact		
<p>The introduction of sex robots into society presents a new and dangerous threat to the humanity of women and girls as they are promoted as ‘equivalent to’ or ‘better than’ them. Sex robots also present a new form of sexual harassment of women and presents threats to children in the form of child sex-abuse dolls. Richardson’s work in these areas has informed policy and recommendations through the development of regulations on sex robots in the UK and USA. The research has also been used to inform public debate on sex robots through advocacy and awareness raising by feminist and women’s rights organisation in the UK, France, USA and Australia.</p>		
2. Underpinning research		
<p>Richardson’s work is a critical study of robots and AI as ‘relational others’. For over 20 years, Richardson has charted the rise of new fields of social, therapeutic and sex robots. Advocates propose that robots are capable of substituting interpersonal relationships: friend, companion, therapist and female lover. Richardson’s work argues that this promotes a harmful culture, where relationships are devalued, and women become reducible to the role they play in male sexual gratification rather than as human beings with equal status. Richardson’s work is among the first of its kind to examine social robots through the prism of attachment studies. Richardson’s book <i>Challenging Sociality</i> [R1] laid out arguments for and against robots as therapeutic aids for children with autism spectrum conditions, questioning theories that suggest these children lack empathy or connection to humans, preferring objects and abstract systems instead. Moreover, an autism and attachment studies approach to social robotics, with its understanding of child development, trauma, bonding, learning, emotion regulation and cognitive and linguistic development, does not support arguments for robots as substitute attachments. Rather, the science of attachment warns us against normalising robots (or other humanmade entities) as substitute ‘intimate attachment others’ [R2, R3].</p> <p>This work laid the foundation for a critique of the harms of social robotics, and subsequently led into a feminist approach to sex robots that take the form of women, children and infants. The case against sex robots was outlined in the 2015 paper ‘The Asymmetrical “Relationship”: Parallels Between Prostitution and the Development of Sex Robots’ [R4], which showed how robots were promoted to men as substitutes for relationships with women, and modelled on a commercial transaction. Classical approaches to the sex industry see it as a ‘commercial exchange of services’ but survivor accounts and feminist research evidences it as a form of sex inequality that allows men who buy sex to respond to prostituted women without empathy. This absence of empathy is a problem for supporting healthy attachments and relationships between men and women, but its existence formed the basis of arguments for sex robots for men. To date, there are only a few examples of male sex robots.</p> <p>Sex robots are an emerging technology but there are significant connections to sex dolls. First, hyperrealist female sex dolls have been around since the 1990s, and the dolls are the physical embodiment of sex robots. Statistically speaking, sex dolls are part of sexual fetish communities</p>		

bought primarily by men. Doll users portray their interactions as 'relationships', behaviours replicated by sex robot users. In her book [R1], Richardson termed this as a 'narcissistic relationship'. Moreover, Richardson's work emphasises how sex inequality is the basis of female sexual objectification. This is translated into a wider cultural context shaping developments online and in robotics and AI, a significant proportion of which is illegal and includes prostitution and sex trafficking, child sexual exploitation, non-consenting or violent pornography, choking, revenge porn, upskirting, voyeurism, underage sexting, online grooming, and slave auctions. From this work, Richardson published paper R4 which also formed the basis for the Campaign Against Sex Robots (CASR) which was subsequently created in September 2015 and was met with a global debate, as described in section 4.

In further research, the 2016 paper 'Sex Robot Matters: Slavery, the Prostituted, and the Rights of Machines' [R5] outlined the first ethical framework against sex robots that is rooted in attachment studies (developed in R1, R2 and R3) and abolitionist feminism (developed from R4). This framework is underscored by an ethical commitment to women's humanity, defence of mutual human relationship, and protection of children.

3. References to the research

Of the below outputs, items R1, R2, R3 and R5 have been through rigorous peer-review before publication. Of note, Richardson is the editor of the special issue for item R3, and item R5 has been within the 20 articles most viewed for the Journal's entire catalogue. Item R4 led to the development of the Campaign Against Sex Robots (CASR) in 2015 and has received over 440,000 page views as of December 2020.

- [R1] Richardson, K. (2018) *Challenging Sociality: An Anthropology of Robots, Autism, and Attachment* (Social and Cultural Studies of Robots and AI), Cham: Palgrave Macmillan; ISBN 9783319747538
- [R2] Richardson, K., Coeckelbergh, M., Wakunuma, K., Billing, E., Ziemke, T., Gomez, P., Vanderborght, B. and Belpaeme, T. (2018) 'Robot enhanced therapy for children with autism (DREAM): A social model of autism', *IEEE Technology and Society Magazine*, 37(1): 30–39; <https://doi.org/10.1109/MTS.2018.2795096>
- [R3] Richardson, K. (2019) 'The human relationship in the ethics of robotics: A call to Martin Buber's I and Thou', *AI & Society*, 34(1): 75–82; <https://doi.org/10.1007/s00146-017-0699-2>
- [R4] Richardson, K. (2015) 'The asymmetrical "relationship": Parallels between prostitution and the development of sex robots', *SIGCAS Computers & Society*, 45(3): 290–293. [Published on the ACM Digital Library as a special issue of the ACM SIGCAS newsletter.] <https://doi.org/10.1145/2874239.2874281>
- [R5] Richardson, K. (2016) 'Sex robot matters: Slavery, the prostituted, and the rights of machines', *IEEE Technology and Society Magazine*, 35(2): 46–53; <https://doi.org/10.1109/MTS.2016.2554421>

GRANTS

- [G1] EU Framework 7 (April 2014–September 2018), 'DREAM (Development of Robots Enhanced Therapy for Children with Autism)'; <https://cordis.europa.eu/project/id/611391>

4. Details of the impact

(1) INFORMING PUBLIC DEBATE AND AWARENESS RAISING

The launch of the CASR led to international debate on the issue of sex robots, women, children and society. Media outlets including Newsnight, BBC News, Fox News, Channel 4 News and Netflix featured Richardson and her work [C1]. This campaign work has gone on to reshape feminist and women's rights organisations that have traditionally campaigned on issues of domestic and sexual violence, the gender pay gap and legal protection for children and their care. These groups include Prostitution Education and Research (US), Collective Shout (Australia), FiLiA, CEASE and NotBuyingIt (UK) and RadicalGirlsss (France) [C2, C3, C4, C5].

This has led to each of these groups putting sex robot technology on their campaigning agendas (e.g. CEASE [C5]). This has included featuring the work of Richardson on their websites, campaigning remit and at events. For example, the CEO of FiLiA has stated the significance of Richardson's work 'as it is important for women's rights groups to understand the impact of these new technologies on women and girls ... As a result of Prof. Richardson's work, we can't ignore sex robots and it has now become a part of our campaigning remit' [C4]. NotBuyingIt also stated that the CASR has 'helped to raise our awareness of this field and its significant ramifications ... we routinely feature CASR's research and insights in our social media, newsletter and other platforms (that reach at least 3,000 followers) ... and has provided us with a useful tool to raise the current threats to women' [C2]. From these associations, Richardson organised an online international workshop titled Sex Tech, Robots & AI: A Feminist Response (4 July 2020), which featured speakers from ten feminist organisations, and over 200 participants, and the CASR has been instrumental in bringing about this change and received positive feedback [C6].

Finally, as a result of the CASR profile, a group in Houston, Texas, called Elijah Rising successfully campaigned to close down a 'sex doll brothel' [C7]. The group used arguments prepared by Richardson in their Change.com petition statement and achieved over 13,000 supporters.

(2) REGULATIONS ON SEX ROBOTS IN THE USA

In the US, Richardson was contacted by Rep. Daniel M. Donovan Jr. who drafted the CREEPER Act of 2017 (H.R. 4655 – CREEPER Act of 2017) [C8, C9] to halt the development of paedophilic robots, for Richardson to provide written evidence for this. This law achieved a pass in the House of Representatives but was not approved in the Senate [C8, C9]. The tenets of the CREEPER Act have gone on to form the basis for new legislation and has recently been revived by Rep. Vern Buchanan in September 2020 (H.R.8236 – CREEPER Act 2.0) [C10].

5. Sources to corroborate the impact

- [C1] Sample of Media Coverage PDF.
- [C2] Testimonial from CEO of NotBuyingIt.
- [C3] Testimonial from Co-Foundress of RadicalGirlsss.
- [C4] Testimonial from CEO of FiLiA.
- [C5] Testimonial from CEO of the Campaign to End All Sexual Exploitation (CEASE).
- [C6] Sample of responses from participants at Sex Tech, Robots and AI: A feminist response event held on 4 July 2020.
- [C7] Successful petition to close down a sex doll brothel in Houston, Texas, cites Richardson's work and the campaign; <https://www.change.org/p/elijah-rising-keep-robot-brothels-out-of-houston>
- [C8] Press release on CREEPER legislation by Republican Senator; <https://www.washingtonexaminer.com/new-york-congressmans-creeper-act-would-ban-sales-of-child-sex-dolls-in-us>
- [C9] H.R. 4655 – CREEPER Act of 2017; <https://www.congress.gov/bill/115th-congress/house-bill/4655>
- [C10] H.R.8236 – CREEPER Act 2.0; <https://www.congress.gov/bill/116th-congress/house-bill/8236?q=%7B%22search%22%3A%5B%22H.R.8236%22%5D%7D&s=2&r=1>