# **Sex Robots: Pain or Pleasure?**

Describe and discuss some of the challenges facing those charged with regulating sex robots, and the strategies they might employ to address them.

There are many challenges that come with regulating sex robots, an emerging technology that sparks intense debate around sexual morality. This essay will traverse two of these challenges – dealing with risk and uncertainty; and managing a multiplicity of ethical positions in an effort to achieve legitimacy in regulatory purposes and standards. This will involve examining the various arguments that transpire in debates about the potential harms and benefits associated with sex robots. This essay proposes three strategic stances regulators may employ to address these challenges – prohibitive; libertarian; and regulative.

## I. What is a sex robot?

Sex robots, or sexbots, are descriptively elusive. Given the emergent nature of the technology, there is not yet a universally accepted definition.¹ This in itself provides challenges for regulation. Nevertheless, John Danaher provides a useful working definition of a sex robot: any artifact used for sexual stimulation with the following three properties: a humanoid form; the ability to move; and some degree of artificial intelligence.² By virtue of the sexbot's physical similarities to humans, the sexual experience is designed to be more realistic than a sex toy.³ They are designed to create an experience as close to a human sexual encounter as possible.⁴ While the definition of a sex robot is susceptible to change as the technology develops, it is recognised that

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<sup>&</sup>lt;sup>1</sup> Francis X. Shen "Sex robots are here, but laws aren't keeping up with the ethical and privacy issues they raise" *The Conversation* (United States, 12 February 2019).

<sup>&</sup>lt;sup>2</sup> John Danaher "Robotic Rape and Child Sexual Abuse: Should they be criminalised?" (2014) 11 Criminal Law and Philos 71 at 72-73.

<sup>&</sup>lt;sup>3</sup> Neil McArthur "The Case for Sexbots" in John Danaher and Neil McArthur (ed) *Robot Sex: Social and Ethical Implications* (The MIT Press, Massachusetts, 2017) 61 at 61.

<sup>&</sup>lt;sup>4</sup> Noel Sharkey, Aimee van Wynsberghe, Scott Robins, and Eleanor Hancock *Our Sexual Future with Robots* (Foundation for Responsible Robotics, Consultation Report, May 2017) at 9.

in its current form we are far from the science fiction depictions of robots as so like humans it is impossible to tell them apart.<sup>5</sup>

# II. Challenge One: Risk and Uncertainty

When a technology is still emerging, regulators face the challenge of being uncertain as to the form or seriousness of risks the technology may pose and therefore the measures that would be effective in mitigating the risks. This is a pertinent challenge for the regulation of sex robots, given there are likely to be "more unanswered questions about sex robots than there are actual sex robots." When risks are uncertain, the regulatory starting point is ambiguated. It is unclear whether regulations should be restrictive or permissive and therefore whether the burden of proof should be on those wanting to introduce sexbots or those wanting to ban or restrict them. The regulatory task is complicated further when the nature of the risks is so unclear that it is difficult to determine whether or not they are easily individualisable.

When determining a regulatory stance in the face of uncertain risks, the starting calculation is merely one of prudence.<sup>8</sup> It involves determining what individual and collective interests exist in regard to the new technology and developing a regulatory approach that best serves these interests.<sup>9</sup> This is a purely prudential judgment and does not yet involve ethical concerns. However, not unexpectedly, this judgment becomes inherently multifaceted when ethical concerns do surface. In the case of sex robots, these ethical concerns are abundant and hotly contested.

# III. Challenge Two: Regulatory Legitimacy

<sup>&</sup>lt;sup>5</sup> John P. Sullins "Robots, Love, and Sex: The Ethics of Building a Love Machine" (2012) 3(4) IEEE Transactions on Affective Computing 398 at 399.

<sup>&</sup>lt;sup>6</sup> Roger Brownsword and Morag Goodwin "Four Key Regulatory Challenges" in *Law and the Technologies of the Twenty-First Century: Text and Materials* (Cambridge University Press, Cambridge, 2012) 1 at 47.

<sup>&</sup>lt;sup>7</sup> Shen, above n 1.

<sup>&</sup>lt;sup>8</sup> Brownsword and Goodwin, above n 6, at 48.

<sup>&</sup>lt;sup>9</sup> Brownsword and Goodwin, above n 6, at 48.

Another key challenge for regulators of sex robots is ensuring the legitimacy of regulatory purposes and standards. This requires regulators to adopt ethically defensible purposes, which involves grappling with the aforementioned complex ethical concerns that arise in sexbot discourse.<sup>10</sup>

Legitimacy in regulatory purposes and standards becomes an elusive target when regulators are operating against a background of ethical pluralism. Regulators are required to accommodate the various ethical positions of a multiplicity of groups. Given the inherently intimate nature of sexbots, these ethical positions tend to be laden with more fervour than those related to other kinds of emerging technologies. This gives rise to open ethical pluralism whereby various stakeholders in the sexbot debate fail to see eye to eye on even baseline principles. For example, while some groups agree on the value of personal and sexual freedom and therefore only disagree on the interpretation and application of regulations; others see the concept of sex with robots as inherently indefensible.

This open ethical pluralism is further problematised by competing conceptions of harm and the subsequent justifications for regulatory intervention. Often John Stuart Mill's liberal harm principle provides the basis for regulatory decisions: "the only purpose for which power can be rightfully exercised over any member of a civilised community, against his will, is to prevent harm to others." This suggests that widespread hostility or disgust – without evidence of harm – are not sufficient reasons for banning an emerging technology.

On this approach, a liberal or pluralistic regulatory regime should aim only to prevent harm, not to force moral conformity.<sup>13</sup> The difficulty then arises from divergent conceptions of harm. Typically, the liberal notion of harm has been interpreted to mean direct, physical harm.<sup>14</sup> This is a challenging standard to apply to emerging technologies because of the lack of empirical evidence as to the consequences of a

<sup>&</sup>lt;sup>10</sup> Brownsword and Goodwin, above n 6, at 51.

<sup>&</sup>lt;sup>11</sup> Brownsword and Goodwin, above n 6, at 51.

<sup>&</sup>lt;sup>12</sup> John Stuart Mill On Liberty (2<sup>nd</sup> ed, John W. Parker and Son West Strand, London, 1859) at 22.

<sup>&</sup>lt;sup>13</sup> Jonathan Sumption "Law's Expanding Empire 1/5" (podcast, 25 May 2019) BBC Reith Lectures <a href="https://www.bbc.co.uk/programmes/mooo57m8">https://www.bbc.co.uk/programmes/mooo57m8</a>.

<sup>&</sup>lt;sup>14</sup> Kathleen Mahoney "The Limits of Liberalism" in Richard F. Devlin (ed) *Canadian Perspectives on Legal Theory* (Emond Montgomery Publications, Toronto, 1990) 57 at 63.

technology that exist in its emergent phase. This challenge is exacerbated in the context of sexbots because the most obvious potential harms are social ramifications that are not always immediately obvious or measurable.

These competing ethical positions and conceptions of harm can be broadly categorised into two camps: anti-sexbot and pro-sexbot.

# IV. Anti-Sexbots

The strongest arguments against sex robots are made on the basis that their manufacture and use will lead to increased rates of sexual violence. The fully physical nature of a sex robot is argued to encourage a primarily sexual and subordinate purpose for women. If sexbots become a vehicle for objectification, it is argued that users may begin to see human partners as sex objects, fostering narcissistic desires. An ever-consenting sexbot may sexualise rape and eroticise dominance. While some argue this could have a more cathartic effect, allowing users to experience their socially and morally unacceptable paraphilia with non-sentient robots rather than real people; others argue this would be an indulgence with a reinforcing effect that operates to encourage illicit sexual practices. 17

It is argued that increasing the attractiveness of sexual dominance, violence, and rape, by allowing users to experience these things with a sexbot, lowers the barriers to committing these acts in reality, on the basis that associating these activities with pleasure is likely to cause users to pursue them with human partners. Similar arguments to those made against hardcore pornography are employed. They reflect concerns that regular exposure to violent and aggressive sexual behaviour will cause the user to seek this out and engage in acts of sexual aggression. This concern is heightened in the case of sex robots given the more realistic experience. It is argued

<sup>&</sup>lt;sup>15</sup> McArthur, above n 3, at 74-75.

<sup>&</sup>lt;sup>16</sup> Sinziana Gutiu "Sex Robots and the Roboticization of Consent" (paper presented to We Robot Conference, Florida, April 2012).

<sup>&</sup>lt;sup>17</sup> Sharkey, van Wynsberghe, Robins, and Hancock, above n 4, at 30-31.

<sup>&</sup>lt;sup>18</sup> Robert Sparrow "Robots, Rape, and Representation" (2017) 9 Int J of Soc Robotics 465 at 469.

<sup>&</sup>lt;sup>19</sup> John Danaher "The Symbolic-Consequences Argument in the Sex Robot Debate" in John Danaher and Neil McArthur (ed) *Robot Sex: Social and Ethical Implications* (The MIT Press, Massachusetts, 2017) 195 at 227.

that harmful behaviour is manifest through positive reinforcement, whereby the user physically acts out violent or degrading practices with instant gratification.<sup>20</sup>

Arguably, this will operate concurrently with the erosion of the notion of consent, as sexbots dehumanise sex and intimacy in a way that promotes the image of women as submissive and ever-consenting.<sup>21</sup> Some argue that if sexbots have no ability to reject their user, this will in turn erode the user's ability to identify and understand consent in real-life sexual interactions.<sup>22</sup> Identifying consent in the law is already a complex exercise, the complexities of which may become further distorted by sex robots. Having an ever-consenting, completely submissive sexual partner reinforces to users that "only no means no" and fails to highlight body language and positive affirmation as essential elements of consent.<sup>23</sup> If it is learned through positive reinforcement that sexbots do not require consent and have no personal needs, users may falsely attribute these qualities to women, making it difficult to identify the rejection of sexual advances in real life.

Furthermore, sexbots may have harmful impacts on female body image. Generally, sexbots are modelled off pornographic images of women and are targeted at heterosexual males.<sup>24</sup> They are typically portrayed as "delicate, passive, obedient, and physically attractive."<sup>25</sup> It is argued that heteronormative and sexualised versions of women reinforce the view of the female body as a commodity, exacerbating gender stereotypes and inequalities.<sup>26</sup> This problem is compounded when these characteristics are presented in a robot designed for sexual use. Arguably, it creates another avenue for fantasies about and the real-life perpetration of harmful behaviour towards women.

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<sup>20</sup> Gutiu, above n 16.

<sup>&</sup>lt;sup>21</sup> Gutiu, above n 16.

<sup>&</sup>lt;sup>22</sup> Danaher "The Symbolic-Consequences Argument in the Sex Robot Debate," above n 19, at 201.

<sup>&</sup>lt;sup>23</sup> Gutiu. above n 16.

<sup>&</sup>lt;sup>24</sup> Sharkey, van Wynsberghe, Robins, and Hancock, above n 4, at 1.

<sup>&</sup>lt;sup>25</sup> Gutiu, above n 16.

<sup>&</sup>lt;sup>26</sup> Kathleen Richardson "The Asymmetrical "Relationship": Parallels Between Prostitution and the Development of Sex Robots" (2016) 45(3) ACM SIGCAS 290 at 291; and Sullins, above n 5, at 402.

In addition to these wider societal harms, it is also argued that sex robots have the potential to entrench their user's social isolation.<sup>27</sup> It is possible that the internalisation of problematic sexual norms desensitises users to human intimacy and empathy.<sup>28</sup> The corollary of this may be an inability to form social and sexual bonds with other humans and a consequential withdrawal from social interactions. In terms of sexual relationships, regular robot users may become accustomed to an ever-consenting sexual partner and therefore hostile to the idea of compromise in their sex lives.<sup>29</sup> As such, users may withdraw from human relationships completely.<sup>30</sup>

According to these arguments, the harmful consequences of sexbots could take many forms, some more direct than others.<sup>31</sup> They may reinforce a culture of sexual objectification and increase levels of sexual violence by representing women as overly deferential and submissive; send harmful signals to society through the erosion of consent norms; reinforce problematic stereotypes of the "ideal" woman; and alienate users from society. This would suggest the risks associated with sexbots are not easily individualisable and therefore regulatory strategies must impose restrictions on the manufacturer rather than the user.

## V. Pro-Sexbots

In response to concerns that sexbots will generate harmful attitudes towards women and increase levels of sexual violence, it has been argued that sexbots have the potential to play a therapeutic role. Some suggest that sex robots create a "safe place" where otherwise harmful paraphilia – like rape fantasies or paedophilia – can be expressed without actually harming others.<sup>32</sup> In this sense, sexbots may be used for the prevention of sex crimes.<sup>33</sup> For example, Shin Takagi, the founder of Trottla – a

<sup>&</sup>lt;sup>27</sup> Danaher, "The Symbolic-Consequences Argument in the Sex Robot Debate," above n 19, at 208; Richardson, above n 26; and Sharkey, van Wynsberghe, Robins, and Hancock, above n 4, at 22.

 $<sup>^{28}</sup>$  Danaher, "The Symbolic-Consequences Argument in the Sex Robot Debate," above n 19, at 208.

<sup>&</sup>lt;sup>29</sup> Gutiu, above n 16.

<sup>&</sup>lt;sup>30</sup> Sharkey, van Wynsberghe, Robins, and Hancock, above n 4, at 23.

<sup>&</sup>lt;sup>31</sup> Danaher, "The Symbolic-Consequences Argument in the Sex Robot Debate," above n 19, at 204; Gutiu, above n 16; Megan Murphy "Sex robots epitomise patriarchy and offer men a solution to the threat of female independence" *Feminist Current* (Canada, 9 May 2017); and Richardson, above n 26, at 291.

<sup>&</sup>lt;sup>32</sup> Danaher, "The Symbolic-Consequences Argument in the Sex Robot Debate," above n 19, at 226.

<sup>33</sup> Sharkey, Wynsberghe, Robins, and Hancock, above n 4, at 25.

company that manufactures child look alike sex dolls – contends that his dolls help paedophiles from offending. He says "we should accept that there is no way to change someone's fetishes. I am helping people express their desires, legally and ethically."<sup>34</sup> Others have gone so far as to suggest some people should be provided prescriptions for sexbots, to allow harmful sexual paraphilia to be directed away from real life victims.<sup>35</sup> Accepting these arguments, sexbots may be cathartic rather than emboldening, and helpful rather than harmful.<sup>36</sup>

There are also potential personal or hedonic benefits that come with sex robots. It is argued that the possession of a sexbot is likely to increase a user's absolute quantity of sexual experiences, and various studies show a direct correlation between sex and happiness.<sup>37</sup> The argument is that if sexual satisfaction is maximised, so too are overall happiness levels.<sup>38</sup> Other personal benefits to increased levels of sex are said to include weight loss, lower stress levels, and better heart and blood pressure.<sup>39</sup> Other social benefits may also be attainable, like reductions in unwanted pregnancies, abortions, and sexually transmitted infections.<sup>40</sup> On the basis of these potential benefits, Neil McArthur argues that sex should therefore be recognised as a basic human good.<sup>41</sup> Sexual deprivation may then be considered a cause of significant hardship, hence McArthur says sex should be distributed in an egalitarian way.<sup>42</sup> Sex robots would provide a method for doing so.

Accordingly, sexbots may then be capable of alleviating the psychological and social costs of sexual deprivation. It is argued that sexual deprivation contributes significantly to social instability and heavy reliance on social services.<sup>43</sup> There are various circumstances that may lead to sexual deprivation, such as demographic

<sup>34</sup> Roc Morin "Can Child Dolls Keep Pedophiles from Offending?" (11 January 2016) The Atlantic <a href="https://www.theatlantic.com/health/archive/2016/01/can-child-dolls-keep-pedophiles-from-offending/423324/">https://www.theatlantic.com/health/archive/2016/01/can-child-dolls-keep-pedophiles-from-offending/423324/</a>.

<sup>35</sup> Morin, above n 34.

<sup>&</sup>lt;sup>36</sup> Danaher, "The Symbolic-Consequences Argument in the Sex Robot Debate," above n 19, at 226.

<sup>&</sup>lt;sup>37</sup> McArthur, above n 3, at 66.

<sup>38</sup> McArthur, above n 3, at 66.

<sup>&</sup>lt;sup>39</sup> McArthur, above n 3, at 66.

<sup>&</sup>lt;sup>40</sup> David Levy "The Mental Leap to Sex with Robots" in *Love and Sex with Robots: The Evolution of Human-Robot Relations* (Harper Collins, New York, 2007) 274 at 300-301; and N. Döring and S. Pöschl "Sex toys, sex dolls, sex robots: Our under-researched bed-fellows" (2018) 27 Sexologies 51 at 54.

<sup>&</sup>lt;sup>41</sup> At 76.

<sup>&</sup>lt;sup>42</sup> At 76.

<sup>&</sup>lt;sup>43</sup> McArthur, above n 3, at 79.

challenges (e.g. uneven gender ratios), mental impairments, or physical disabilities.<sup>44</sup> Sexbots may become the only sexual outlet for some populations, providing them with a way to express their sexuality without these constraints.<sup>45</sup> Providing an opportunity to practice with sex robots may also have the potential to facilitate a user's reintegration into real life sexual experimentation, alleviating some of the aforementioned costs of sexual deprivation.<sup>46</sup>

More simplistic arguments can be made on the basis of liberal principles. McArthur contends that given there is no concrete proof of harm caused by sex robots, every person has the right to use one.<sup>47</sup> He argues that sex, in a private domain, which does not cause harm to others, is protected by the right to privacy, an integral right in liberal democracies.<sup>48</sup> Arguably, societal interference in the lives of individuals in such an intensely private domain is an illegitimate use of state power insofar as it subjects private activities to moral condemnation.<sup>49</sup> Furthermore, it is argued that in the modern era of expanding sexual freedom, it is likely that in the near future sex robots will be considered unquestionably acceptable, thereby delegitimising any regulation of their use. Proponents of sexbots liken this to other aspects of sexuality that were once considered perverted, like homosexuality and masturbation.<sup>50</sup>

According to these arguments, sexbots will produce more positive consequences than negative. These may include the treatment of harmful paraphilia; health benefits; an increase in overall happiness; and the alleviation of sexual deprivation. Further, it is contended that regulation of private sexual activities should be treated with extreme caution in a liberal democracy. This would suggest the risks associated with sexbots are easily individualisable, meaning regulatory intervention should be kept to a minimum.

# VI. Strategies

<sup>&</sup>lt;sup>44</sup> McArthur, above n 3, at 77-78; and N. Döring and S. Pöschl, above n 40, at 54.

<sup>&</sup>lt;sup>45</sup> Elen C. Carvalho Nascimento, Eugênio da Silva, and Rodrigo Siqueira-Batista "The "Use" of Sex Robots: A Bioethical Issue" (2018) 10 Asian Bioethics Review 231 at 238; and Levy, above n 40, at 290-291.

<sup>46</sup> Shen, above n 1.

<sup>47</sup> At 62.

<sup>&</sup>lt;sup>48</sup> At 63.

<sup>&</sup>lt;sup>49</sup> McArthur, above n 3, at 64.

<sup>&</sup>lt;sup>50</sup> Levy, above n 40, at 287.

To implement strategies that are perceived as legitimate in terms of their purposes and standards, regulators should seek to comport with ethical convictions that are widely held; reasonably strongly held; and applied with a degree of consistency across a range of situations.<sup>51</sup> Given the ethical pluralism and divergence of opinions that exists around sexbots and their potential for harm, this will be a difficult task. Against this background, there are three potential strategic stances regulators may take: prohibitive, libertarian, or regulative.<sup>52</sup>

### A. Prohibitive

A prohibitive stance would prevent the use of sexbots, possibly extending criminalisation to those who manufacture, distribute, and use the technology.<sup>53</sup> A similar approach to childlike sex robots is being considered in the United States, whereby importers and receivers of the sexbots would be liable to imprisonment.<sup>54</sup> This approach would align with the concerns of those who see sexbots as inherently harmful, meaning their use expresses something about the moral character of the user that is worthy of legal prohibition.<sup>55</sup> This would require concerning the criminal law with the moral character of individuals, contradicting liberal ideals of moral autonomy.<sup>56</sup> However, a prohibitive stance would be justified because – according to those who see sexbots as likely to increase the prevalence of sexual violence and erode consent norms – criminal sanction would be targeting conduct expressive of behaviour the law has already deemed immoral and worthy of criminalisation.<sup>57</sup>

#### B. Libertarian

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<sup>&</sup>lt;sup>51</sup> Colin Gavaghan "LAWS 428, Lecture 5, Pluralistic Legitimacy" (LAWS 428, University of Otago, Dunedin, 24 July 2019).

<sup>&</sup>lt;sup>52</sup> John Danaher, Brian Earp, and Anders Sandberg "Should We Campaign Against Sex Robots?" in John Danaher and Neil McArthur (ed) *Robot Sex: Social and Ethical Implications* (The MIT Press, Massachusetts, 2017) 90 at 95.

<sup>53</sup> Danaher, Earp, and Sandberg, above n 52, at 95.

<sup>&</sup>lt;sup>54</sup> Curbing Realistic Exploitative Electronic Pedophilic Robots Act 2017 (HR 4655, 115<sup>th</sup> Congress).

<sup>55</sup> Danaher, "The Symbolic-Consequences Argument in the Sex Robot Debate," above n 19, at 211.

<sup>&</sup>lt;sup>56</sup> Danaher "Robotic Rape and Child Sexual Abuse: Should they be criminalised?," above n 2, at 79.

<sup>&</sup>lt;sup>57</sup> Danaher, "Robotic Rape and Child Sexual Abuse: Should they be criminalised?," above n 2, at 80-81.

A libertarian stance would favour complete freedom to manufacture and use sexbots. This approach would align with arguments that the perceived harmful consequences of sexbots are "speculative and indirect", thereby delegitimising any regulation or prohibition.<sup>58</sup> A libertarian approach would suggest that any practical concerns regarding the use of sexbots are minor because they are designed to cause pleasure and are therefore not harmful.<sup>59</sup> This would allow for prudential pluralism, whereby the decision whether or not to manufacture or use sex robots is devolved to the individual to make their own assessment of the benefits and risks.

## C. Regulative

A regulative approach would involve some oversight and intervention, but not a complete ban on sex robots. 60 In the face of uncertain risks, a regulative approach may be the best way to attain legitimacy of purposes and standards in regulation. A regulative approach recognises that there is not yet sufficient empirical evidence to determine whether or not sexbots are harmful, and therefore no sufficient basis to completely ban sexbots *or* to welcome them with open arms.

However, the uncertainty of risk and disagreement about the potential for harm makes it unclear whether a weak or strong form of regulation should be pursued. A weak form would involve a more permissive regulatory tilt in favour of sexbot manufacturers. The corollary would be a "downstream" regulatory phase, whereby more restrictive regulations would be placed on manufacturers only once the harms associated with sexbots can be definitively identified, with the burden on regulators to identify these harms. A weak regulatory position may then simply involve requesting that manufacturers and users of sexbots be aware of the potential ethical issues and make an effort to address them however they see fit.<sup>61</sup>

A stronger regulatory position would require a more restrictive tilt and an "upstream" regulatory phase. This may involve requiring that manufacturers take steps to remove any problematic symbolism associated with sexbots, such as making their appearance

<sup>58</sup> Danaher, Earp, and Sandberg, above n 52, at 129.

<sup>&</sup>lt;sup>59</sup> Danaher, Earp, and Sandberg, above n 52, at 124-125.

<sup>60</sup> Danaher, Earp, and Sandberg, above n 52, at 95.

<sup>&</sup>lt;sup>61</sup> Danaher, Earp, and Sandberg, above n 52, at 96.

less pornographic, or removing the ever-consenting element e.g. having the robot sometimes randomly refuse to engage in sexual activities or ensuring it always provides positive, affirmative signals of consent.<sup>62</sup> Some have suggested that sex robots should be unisex, not representing the female figure at all.<sup>63</sup> Sinziana Gutiu has proposed a form of civil liability that facilitates the reversal of, or compensation for, harmful impacts when there is empirical evidence that manufacturers or users failed to comply with ethical standards and consequently caused harm to a specific group of people.<sup>64</sup>

The regulation of sex robots could provide a means of research into deeper societal problems regarding sexual attitudes towards women and perceptions of consent. If it is accepted that sexuality is socially constructed, the promotion of research and discourse – through the regulation of sex robots – may provide a unique opportunity to alter sexist notions of sexuality.<sup>65</sup> This may allow violent and demeaning sexual attitudes towards women to be observed and understood, and therefore corrected.<sup>66</sup> Regulation allows this to be done while accommodating the freedom to be innovative in the creation of sex technologies and also providing an avenue to minimise potential harm.

## VII. Conclusion

The challenges facing regulators of sex robots are multiple, as are the possibilities for harm and/or benefit. As such, there are various strategies regulators could employ to address these challenges, ranging from prohibitive to libertarian. On the basis of the arguments discussed in this essay, I would recommend a more restrictive regulatory strategy, but one which falls short of complete prohibition.

<sup>&</sup>lt;sup>62</sup> Danaher, Earp, and Sandberg, above n 52, at 112; Danaher "Robotic Rape and Child Sexual Abuse: Should they be criminalised?," above n 2, at 91; and Danaher, "The Symbolic-Consequences Argument in the Sex Robot Debate," above n 19, at 220.

<sup>63</sup> Nascimento, da Sliva, and Siqueira-Batista, above n 45, at 236.

<sup>&</sup>lt;sup>64</sup> Above n 16.

<sup>65</sup> Gutiu, above n 16.

<sup>&</sup>lt;sup>66</sup> Gutiu, above n 16.