

Sex Robots and Roboticization of Consent

Abstract: Technology profoundly affects the way humans interact with each other, especially in the most intimate spheres of life. Creators of sex robots apply technological advances in artificial intelligence (AI) to produce and market sexual partners for consumers. In turn, these new interactions will affect the way humans behave with one another. The paper will explore how male interactions with female-sexbots will erode the notion of consent by dehumanizing sex and intimacy in male-female relationships. The paper argues that sex robots foster antisocial behaviour in users and promote the idea that women are ever-consenting beings, leading to diminished consent in male-female sexual interaction. The legal and social implications of sex robots as well as steps for regulation will be explored.

The essence of being human is being imperfect.¹ Imperfections are part of what makes individuals unique and valued. When describing a woman he loved, Shakespeare emphasized the importance of imperfect real-life qualities over idealistic and superficial notions of perfection²:

My mistress' eyes are nothing like the sun;
Coral is far more red than her lips' red;
If snow be white, why then her breasts are dun;
If hairs be wires, black wires grow on her head.

...

And yet, by heaven, I think my love as rare
As any she belied with false compare.

In sonnet 130, Shakespeare implicitly challenges the surreal depiction of women in love sonnets by mocking the convention of unrealistic comparisons. In poetry, men often describe women in ways that reveal more about the poet's personal fantasies, than how the woman really looks or behaves. Such unrealistic standards exist for women today, and have begun to make their way into the field of robotics and artificial intelligence (AI). In an attempt to create the perfect fembot, roboticists strive to imitate stereotypical conceptions of women's behavior and appearance, while eliminating undesirable characteristics. This approach has lead robotics to enter one of the most intimate spheres of human life.

¹ George Orwell, "Reflections on Ghandi" 1949.

² William Shakespeare, Sonnet 130.

Sex robots build AI technology and combine sensory perception, synthetic physiological responses and affective computing. Their intended purpose is to facilitate sexual interaction and provide companionship for human users.³

This paper focuses solely the effects of heterosexual male interaction with female sex robots. Discussions about other sex robot uses, legal or ethical implications of child sex robots, or the idea of robot prostitution are beyond the scope of this paper. While the overall sex robot market may include sex robots of either genders and users of either orientation, the harms associated with female sexbots when used by heterosexual males are of a greater concern. The effects of sex robots will be analyzed under the assumption that the current trend of male heterosexual adult industry consumers is indicative of the sex robots user demographics.

By design, sex robots do not have the ability to complain or reject the user.⁴ To the user, the sex robot looks and feels like a real woman who is programmed into submission and which functions as a tool for sexual purposes. The sex robot is an ever-consenting sexual partner and the user has full control of the robot and the sexual interaction. By circumventing any need for consent, sex robots eliminate the need for communication, mutual respect and compromise in the sexual relationship. The use of sex robots results in the dehumanization of sex and intimacy by allowing users to physically act out rape fantasies and confirm rape myths.⁵ Of greatest concern is how sex robots will affect men's ability to identify and understand consent in sexual interactions with women. Widespread use of sex robots will promote user's antisocial practices and impair the dignity of women.

³ David Levy, "Love and Sex with Robots" 2008 New York: HarperCollins p.68.

⁴ Dough Hines, "My Sex Robot" documentary, SBS online <
<http://www.sbs.com.au/documentary/program/737/My-Sex-Robot>>.

⁵ Kelly Cue Davis, Jeanette Norris et al., "Men's Likelihood of Sexual Aggression: The Influence of Alcohol, Sexual Arousal, and Violent Pornography", 2006, *Aggressive Behaviour*, Volume 32, pages 581–589 (2006). Rape myths refer to the idea that rape is enjoyable for the victim.

From Myth to Android

The idea of fabricating a woman for a man's purpose can be traced back to ancient myth. In the Greek myth of Pygmalion and Galatea, King Pygmalion's hatred for women motivate him to create a statue of the "perfect" woman, Galatea, whom he falls in love with.⁶ Aphrodite brings Galatea to life, and she becomes Pygmalion's wife. Another example is the Christian creation story, where God creates Eve to address Adam's loneliness.⁷ With the help of AI and social robotics, the myth of a woman created to suit a man's needs is made into reality.

Androids are socially intelligent, anthropomorphized robots that act as sophisticated tools for humans.⁸ Although they do not serve sexual or reproductive purposes, Androids like Repliee Q2, Actroid DER, Actroid F and Aiko have been created to assist with a variety of services. Aiko is a female android originally created to assist the elderly with simple tasks and keep them company. The technology includes sophisticated software that elicits responses to physical sensation like pressure and temperature, artificial limbs, video recognition and a basic ability to read and converse in English and Japanese. Aiko's face and body, like many androids and geminoids, is made out of silicone that looks and feels like human skin.⁹ Actroid F takes the technology a step further by focusing the movement freedom in the face, allowing it to detect and imitate people's expressions.¹⁰

⁶ Geoffrey Miles (ed.), "Classical mythology in English literature : a critical anthology", 1999, Routledge.

⁷ Mieke Bal, "Sexuality, Sin and Sorrow: The emergence of female character [a reading of Genesis 2-3]," in Susan Rubib Suleiman (ed.) "The Female Body in Western Culture", 1986, Boston: Harvard University Press.

⁸ Jennifer Robertson, "Gendering Humanoid Robots: Robo-Sexism in Japan", *Body and Society*, 16(2) 2010, p. 1-36.

⁹ Project Aiko, online at <<http://www.projectaiko.com/>>. Aiko is a Canadian-made robot, who is unable to walk. Aiko V2 is new model.

¹⁰ "Actroid-F Robot Gets A Brother And An Eye Implant" 2011, video online at <<http://www.diginfo.tv/v/11-0227-r-en.php>>.

In order to effectively interact with humans, the success of these androids or geminoids crucially depends on their ability to imitate human appearance and behaviour.¹¹ At the same time, the ideal paradigm is not to create a synthetic human that falls victim to the Uncanny Valley or worse, the Uncanny Cliff.¹² Social robots must look and interact in ways that play on people's expectations about what is socially acceptable.¹³ Thus, roboticists program and design "female robots" based on assumptions about gender roles. In doing so, complex notions of gender are reduced to common sense ideas about how women look, behave and respond.

Ethics in Design: Reinforcing Stereotypes and Furthering Inequality

Technology has the potential to remedy or exacerbate gender inequalities in society.¹⁴ Langdon Winner argues that technology is inherently political. He defines politics as "arrangements of power and authority in human association as well as activities that take place within those arrangements."¹⁵ Upon creation, technology embodies interests and values that influence the form and quality of human interactions. The intended purpose and characteristics of technology is introduced and further develops in the social context, where it embodies specific forms of power and authority.¹⁶ The way technology is designed communicates certain values to

¹¹ Hiroshi Ishiguro and Shuichi Nishio, "Building artificial humans to understand humans", 2007, *Journal of Artificial Organs* 10, p 133-142. Differences between humanoids (designed to have human-like qualities but not necessarily human looking eg. Robovie) android (humanoid designed to look exactly like a human – eg. Aiko), and geminoids (an android built in the image of a person instead of an imagined individual). See Jennifer Robertson, "Gendering Humanoid Robots: Robo-Sexism in Japan", *Body and Society*, 16(2) 2010, p. 1-36.

¹² Brian Duffy, "Anthropomorphism and the Social Robot" *Robotics and Autonomous Systems* 42 (2003) 177–190 discussing Christopher Bartneck, Takayuki Kanda et al., "Is the Uncanny Valley an Uncanny Cliff?" 2007, 16th IEEE International Conference on Robot & Human Interactive Communication, online at <<http://ieeexplore.ieee.org/Xplore/login.jsp?url=http%3A%2F%2Fieeexplore.ieee.org%2Fstamp%2Fstamp.jsp%3Ftp%3D%26arnumber%3D4415111&authDecision=-203>>.

¹³ Brian Duffy, "Anthropomorphism and the Social Robot" *Robotics and Autonomous Systems* 42 (2003) 177–190 at 182.

¹⁴ Jennifer Robertson, "Gendering Humanoid Robots: Robo-Sexism in Japan", *Body and Society*, 16(2) 2010, p. 1-36.

¹⁵ Langdon Winner, *The whale and the reactor: a search for limits in an age of high technology*, (Chicago: U. of Chicago Press, 1986) at 22.

¹⁶ Stanford Encyclopedia of Philosophy, "Philosophy of Technology", 2009, online at <<http://plato.stanford.edu/entries/technology/>>.

those who use it, and in turn affects how humans live their lives and interact with each other. For example, the creation of cars contributed to the assembly line, increased construction of paved roads, and development of urban centers. Technology has ethics because the design and function of artifacts, including gendered robots, reproduce values in society, while also creating new dynamics between people.¹⁷

Androids that are gendered to look female are assigned stereotypically feminine characteristics.¹⁸ By reproducing negative stereotypes about women, gendered robots have ethics because communicate values about women to persons who interact with the robots. Aiko, Actroid DER and F, as well as Repliee Q2 are representations of young, thin, attractive oriental women, with high-pitched, feminine voices and movements. Actroid DER has been demoed wearing either a tight hello kitty shirt with a short jean skirt, and Repliee Q2 has been displayed wearing blue and white short leather dress and high-heeled boots.¹⁹ Despite being presented this way, the intended purpose of the female androids and gynoids is non sexual. However, as a result of attributing stereotypically feminine qualities, gender inequalities are replicated, and “female” androids become sexualized.

Viewers’ comments on youtube videos of Aiko, Actroid DER and F, and Repliee Q2 provide an anecdotal illustration of how someone surfing the web might be reacting. In general, comments on the female robots rarely focused on the quality of the technology. Instead, viewers were concerned with the android’s physical attractiveness or it’s ability to do stereotypically female tasks. Some examples of the comments are “make me a sandwich,” “shut up and strip,”

¹⁷ John P. Sullins, “Introduction: Open Questions in Roboethics“ *Philosophy and Technology* (2011) 24:233–238

¹⁸ Jennifer Robertson, “Gendering Humanoid Robots: Robo-Sexism in Japan”, *Body and Society*, 16(2) 2010, p. 1-36.

¹⁹ See video of Actroid DER online at <<http://www.youtube.com/watch?v=WbFFs4DHWys>>, and Repliee Q2 <

or “I’d hit it”.²⁰ Viewer’s comments on the male androids and gynoids videos, such as Geminoid HI-1, Geminoid DK, and Jules on the other hand were generally focused on the quality of the technology, realistic features or fear of robots overpowering humans.²¹

The negative gender stereotypes that women face are reproduced in the mere existence of female robots. Female robots are portrayed delicate, passive, obedient, and physically attractive representations of women. Sex robots will further entrench these stereotypes and re-define sex and intimacy between men and women. As innovations in android and gynoid technology develop, these advances will be mirrored in sex robot design and programming.

From Android to Sex Robot

Sex robots are anthropomorphized personal service androids, made specifically for sexual interaction with humans.²² They combine affective computing, sensory perception and software to emulate physiological responses with flesh-like silicone technology used in sex dolls.²³ At present, sex robots are in their infancy because their function is based on the ability to respond to sensors, and not autonomy or the ability to “think”. However, as artificial intelligence becomes more sophisticated, sex robots are constantly improving. In time, sex robots will become physically identical to a woman, responsive to all senses, able to converse imitate the full spectrum of human emotions, and emulate “autonomous” decision-making.²⁴

²⁰ Viewer’s online comments at <<http://www.youtube.com/watch?v=WbFFs4DHWys>>.

²¹ For Geminoid DK video see online <<http://www.youtube.com/watch?v=z6bfjkVTNNo>>; for Geminoid HI-1 see online <http://www.youtube.com/watch?v=CfL_wZk25TM>; and for Jules see online <<http://www.youtube.com/watch?NR=1&feature=fvwp&v=o3jVWwxNHMc>>.

²² Brian Duffy, “Anthropomorphism and the Social Robot” *Robotics and Autonomous Systems* 42 (2003) 177–190. The word comes from the Greek word *anthropos* for man, and *morphe*, form/structure.

²³ RealDoll creates realistic dolls made from silicone, online: Realdoll <<http://www.realdoll.com/>>. Project Aiko also provides a description of the technology used for the android <<http://www.projectaiko.com/technology.html>>.

²⁴ Blay Whitby “Do you want a Robot Lover? The Ethics of Caring Technologies” at p 256 in *Robot Ethics* by Patrick Lin, Keith Abney and George Berkey 2011 eds

Andy Droid, created by First Androids in Germany, has moving parts, a pulse and heating body, but no AI.²⁵ Roxxy by True Companion, is motorized, anatomically correct, with a mechanical heartbeat and “girlfriend personalities”.²⁶ However, she cannot move on her own, has slow response and her facial features are not as realistic as those of high-end sex dolls.²⁷ Even though sex robots have a long way to go before facilitating the type of sexual interaction and companionship that sex robot enthusiasts hope for, ethical issues have already begun to emerge.²⁸

Sex robot fanatics hope that in time and with the right technology, sex robots will be indistinguishable in the way they look, feel and react from real women.²⁹ This will allow any man to live out needs or fantasies that would be difficult or impossible to actualize with a woman.

Sex robots can be anticipated to serve three main applications. First, they can be used to assist with therapy or treatment for a diverse array of patients in hospitals or homes, including disabled individuals.³⁰ A second use could be to stimulate physical or emotional companionship for individuals in society, not necessarily as part of treatment or therapy. The movie *Lars and the Real Girl* illustrates the emotional companionship aspect of this category, while some of the sexbot fanatics in *My Sex Robot* suggest a more physically focused purpose.³¹ Lastly, sex robots could be used for activities that individuals cannot or prefer not to engage in with other people

²⁵ Meg White, “This is the State of the Sex Robot Market”, 4 May 2011, Advanced Human Technologies: Future of Sex online <<http://futureofsex.net/robots/this-is-the-state-of-the-sex-robot-market/>>.

²⁶ True Companion online <<http://www.truecompanion.com/>>.

²⁷ Meg White, “This is the State of the Sex Robot Market”, 4 May 2011, Advanced Human Technologies: Future of Sex online <<http://futureofsex.net/robots/this-is-the-state-of-the-sex-robot-market/>>. Users have also requested models resembling Pamela Anderson, Angelina Jolie and Michael Jackson. See Kate Jackson, “My Girlfriend is a Robot” 12 January 2011, The Sun online <<http://www.thesun.co.uk/sol/homepage/features/3231673/My-girlfriend-is-a-robot.html>>.

²⁸ Patrick Lin, Keith Abney, George Bekley, “Robot ethics: Mapping the issues for a mechanized world”, 2011, *Artificial Intelligence* 175 p 942-949.

²⁹ Dough Hines, director, “My Sex Robot”, 2011 online at <http://www.youtube.com/watch?v=ahtzQtd_JiM>.

³⁰ Blay Whitby “Do you want a Robot Lover? The Ethics of Caring Technologies” at p 256 in *Robot Ethics* by Patrick Lin, Keith Abney and George Berkeley 2011 eds.

³¹ See Craig Gillespie, director, “Lars and the Real Girl”, 2007, and Dough Hines, director, “My Sex Robot”, 2011, online at <http://www.youtube.com/watch?v=ahtzQtd_JiM>.

because they are illegal, dangerous or socially frowned upon. For example, a user that enjoys extremely violent or degrading sex may have difficulty finding human partners with whom to live out such acts. Another example is men who support the sex trade industry but would prefer to avoid the legal consequences or social stigma. In this category, sex robots could also have applications in the army or prisons to address the sexual desires of soldiers or convicts.

Some proponents claim that functional uses of sex robots are beneficial for society and justify the use of sex robots.³² However, if we examine the deeper motivations of the user and the nature of the interaction, it becomes apparent that the harms caused by sex robots to the user, women and society outweigh any functional benefits.

Sex robots are physical, interactive manifestations of women used for a sexual purpose. Female sexbots emulate the look and feel of a human woman who is programmed into submission. The sex fembot does not have the ability to decline, criticize or be dissatisfied with the user. In the interaction, sex robots are implicitly consenting to any physical act. The user can control the look, feel and personality of the sex robot, as well as its reactions to various stimuli.³³ A key element of sex robot interaction is the removal of certain abilities to say no, to have needs, desires, and dislikes. Another is the inability to make choices and to eliminate certain uncomfortable or undesirable exchanges or qualities that tend to occur in men's interaction with women, such as the need to communicate, listen, compromise and respect one another.

The documentary *My Sex Robot* depicts three men on the search for a fully functioning sex robot.³⁴ In the documentary, sex robot fanatics are simplistically depicted as individuals with an unusual fetish. However, statements made by the featured sex robot enthusiasts are highly

³² David Levy, "Love and Sex with Robots", 2008 New York: Harper Perennial.

³³ For example, Roxxxxy comes with three personalities "frigid farrah", "wild wendy", and "S&M susan". Susan Karlin, "Red-Hot Robots", June 2010, IEEE Spectrum, online <<http://spectrum.ieee.org/robotics/humanoids/redhot-robots>>.

³⁴ Dough Hines, director, "My Sex Robot", online at <http://www.youtube.com/watch?v=ahtzQtd_JiM>.

suggestive of antisocial and misogynistic motivations. Their excitement seems to derive from a desire to have a sex partner that cannot challenge them, is submissive and controllable.³⁵ In response to *Roxxy*, one of the men featured in the movie responded with great enthusiasm, saying “she has what many fembot fanatics like: the blank stare; unawareness.”³⁶ To men, what is most attractive about sex robots is that “it can't say no to you,”³⁷ and the ability, or rather illusion, of sexually controlling a woman.

Harm

Although sex robots do not (currently) have feelings or free will, their ability to enter one of the most physically and emotionally intimate areas of human life raises broader questions about ethics and morality. These questions are not focused on the sex robot as the victim of the harm, but rather on how the nature of the interaction between user and robot will cause harm to others. Sex robots result in moral and psychological harm to individual users and society. The harm is not necessarily apparent in terms of a perfectly defined, identifiable effect. Instead, it is discernible in the harmful effects on societal notions of consent in sex and intimacy.

Sex robots accommodate user's existing antisocial tendencies, and through repetitive interaction, promote lies about women's humanity. Sex robots are interactive, physical representations of women, which serve as a means to the end of sexual gratification. Such robots are indistinguishable from women to the user. Moreover, because the robot has no choice but to consent to any activities initiated by the user, rape is eroticized. If sex robots become as technologically advanced as fembot fanatics hope, men will not need to use force or fantasize to sexually control women, because the sex robot makes it a reality. Thus, the most problematic

³⁵ Kate Jackson, “My Girlfriend is a Robot” 12 January 2011, *The Sun* online <<http://www.thesun.co.uk/sol/homepage/features/3231673/My-girlfriend-is-a-robot.html>>.

³⁶ Interview with Keizo in Dough Hines, director, “My Sex Robot”, 2011 online at <http://www.youtube.com/watch?v=ahtzQtd_JiM>.

³⁷ Dough Hines, director, “My Sex Robot”, 2011 online at <http://www.youtube.com/watch?v=ahtzQtd_JiM>.

impact of sex robots in a society that is already facing challenges in achieving gender equality, is the erosion of consent. This effect poses a danger to society that in builds on and surpasses the harms attributed to pornography.

Societal Harms: Beyond Pornography

The harms caused by sex robots differ in two main ways from those caused by pornography. First, unlike pornography, sex robot interactions are complete experiences, in the sense that the user is fully engaged in the physical and emotional encounter. The user is therefore more likely to ascribe and internalize a primarily sexual and submissive purpose for women, through direct sensory experience. Second, the harm in pornography is based on the type of content in the material, while sex robot harm is triggered by its very use.

There is a lack of consensus over what pornography is. Justice Stewart is often quoted on this point as saying “I can’t define pornography, but I know it when I see it.”³⁸ Pornography has been distinguished from erotica, which is seen as portraying nonviolent, nondegrading, and consensual sexual activity.³⁹ For the purpose of this paper, pornography is broadly defined as heterosexual material that is sexually explicit.⁴⁰

Heterosexual pornographic material reinforces sexist practices in society.⁴¹ Exposure to pornography has been found to: violate principles of egalitarianism, non-violence and consensual action in relationships;⁴² promote lies that women are primarily submissive, sexual creatures;⁴³

³⁸ *Jacobellis v. Ohio* 378 US 184 (1964).

³⁹ Lyle Casavant and James Robertson, “The Evolution of Pornography Law in Canada” 2007, online <<http://www.parl.gc.ca/Content/LOP/ResearchPublications/843-e.htm#rightsissue>>.

⁴⁰ Stanford Encyclopedia of Philosophy, “Pornography and Censorship”, 2004, online <<http://plato.stanford.edu/entries/pornography-censorship/#1>>.

⁴¹ Catharine MacKinnon, “Francis Biddle’s Sister” Pornography, Civil Rights, and Speech” 1987 in “The Problem of Pornography”, 1995, Susan Dwyer ed. California: International Thomson Publishing p. 53.

⁴² Attorney General's Commission on Pornography (the "Meese Commission"), *Final Report* (U.S., 1986), vol. 1, at pp. 938-1035

⁴³ Helen Longino “Pornography, Oppression, and Freedom: A Closer Look” in “The Problem of Pornography”, 1995, Susan Dwyer ed. California: International Thomson Publishing at p.34.

and bear a causal relationship to changes in attitudes and beliefs.⁴⁴ When it comes to pornography, fantasizing is inseparable from using of sex toys, pornographic images, or realistic-looking dolls for erotic purposes. In order to make the experience realistic, men use their imagination to turn sex toys into real women, make themselves part of the pornographic image or ascribe physical responses and personalities to sex dolls.

The first difference is that in pornography, the harm occurs through observation, or social learning, while sex robots allow the user to live out sexual desires. Social cognitive theory explains that by observing pornography, the viewer learns from the actions and responses in the images or video.⁴⁵ If the images are violent or demeaning, the viewer internalizes what is being observed and may or may not respond in that manner when placed in a corresponding scenario. Sex robots however cause harm through positive reinforcement. The user learns violent or degrading practices by physically acting them out with an entity that is indistinguishable from a woman, and is rewarded instantly. During the interaction, at least on a subconscious level, the user will not differentiate between sex with a consenting woman and with an ever-consenting sex robot.⁴⁶ This direct form of interaction between the user and sex robot exacerbates the harmful impact caused by pornography.

The second difference is that sex robot harm is brought about by its use, because any type of interaction with the sex robot disregards consent. On the other hand, the harms in pornography occur when the material is obscene. The Supreme Court of Canada ruled that obscenity includes certain types of harmful, pornographic material.⁴⁷ Obscenity is defined as material that has as a

⁴⁴ *R v Butler*, 1 SCR 452, 483 (1992), 89 DLR (4th) 449, 70 CCC (3d) 129 [*Butler*].

⁴⁵ A Bandura, 1989 “Social Cognitive Theory”, *Annals of Child Development*, 6, 1-60.

⁴⁶ Matthias Scheutz “The Inherent Dangers of Unidirectional Emotional Bonds between Humans and Social Robots” p216 in *Robot Ethics* by Patrick Lin, Keith Abney and George Berkey 2011 eds

⁴⁷ *Butler* supra note 44. Section 163(8) of the *Criminal Code*, RSC ch-C-46 s.163(8) (1985) criminalizes obscene materials.

dominant characteristic the undue exploitation of sex combined with crime, horror, cruelty or violence.⁴⁸ Obscenity may also be found in materials that depict explicit sex, subjecting people to degrading or dehumanizing treatment, based on what the court believes the community would tolerate, and degree of harm that could flow from exposure.⁴⁹

Similarly in the United States, only certain kinds of pornography have been deemed harmful and obscene. The US Supreme Court applies a similar contemporary community standard to assess whether the pornographic material appeals to the prurient interest, offensively depicts or describes sexual conduct specifically defined by the applicable state law, and taken as a whole, lacks serious literary, artistic, political, or scientific value.⁵⁰

Although there are jurisdictional differences in the type of pornography that is found obscene, the harm is assessed based on material's content and context. Sexual materials, such as provocative paintings, are seen as erotic and not harmful. Certain types of pornography are even seen as empowering women by validating women's will to pleasure in a manner that portrays a range of female sexuality.⁵¹ However, due to the direct, realistic and intimate nature of the interaction with sex robots, lack of consent is ever present. Regardless of whether or not the user is interacting with the sexbot in a degrading or gentle manner, all sexual activity the user engages in circumvents the required consent.

Erosion of Consent

Consent is required in contract, medical procedure and sexual interaction in order to protect individual autonomy. Medical consent and consent in sexual interaction are especially important because these activities involve the physical and psychological violation of a person,

⁴⁸ *Criminal Code, RSC ch-C-46 s.163(8) (1985).*

⁴⁹ *Butler, supra* note 44 at para. 57.

⁵⁰ *Miller v. California*, 413 US 15, 24 (1973).

⁵¹ *Butler supra* note 44.

and employ the notion of autonomy-as-grounded-in-the-human-body.⁵² A person must give their active, informed consent and choose when to engage in invasive acts involving a risk of harm.

Historically, the law did not recognize the importance of autonomy for all persons. Sexual assault and rape was by definition not possible between husband and wife.⁵³ Once married, a woman was considered to be constantly consenting to her husband's sexual desires. Some feminists have suggested that because society is built around male supremacy, all heterosexual sex is rape.⁵⁴ However, criminal law has drawn a distinction between rape and sexual interaction, based on the presence or absence of consent. A person can only engage in sex when their partner is consenting to the sexual activity. Rape on the other hand is a sexual act without consent.⁵⁵

In Canada and the US, the rate of rape and sexual assault reported to police has been increasing.⁵⁶ These increased rates generate public concern about women's safety, perception in society, as well as reinforcing men's dominant behaviour in sexual acts.

In Canada, s. 271 of the *Criminal Code* criminalizes sexual assault (including rape), defined as intentional sexual touching, whether direct or indirect, without consent.⁵⁷ Consent is defined in s. 273.1(1) as "the voluntary agreement of the complainant to engage in the sexual activity in question." Section 273.1(2)(d) and (e) declares that no consent is obtained if the complainant expresses, by words or conduct, a lack of agreement, or if the complainant has

⁵² Susan Schmeiser, *Forces of Consent*, 32 *Studies in Law, Politics and Society* 3 (2004).

⁵³ See Model Penal Code 213.1(1) for US and s.159 in the *Canadian Criminal Code*. In Saudi Arabia (and other countries as well) this is still the case.

⁵⁴ See Andrea Dworkin *Intercourse*, 2006, New York: Basic Books.

⁵⁵ This article discusses this dichotomy in the context of a robot refusing to have sex with its user, Annalee Newitz, "Can a Robot Consent to Have Sex With You?", 22 December 2008, online <<http://io9.com/5115376/can-a-robot-consent-to-have-sex-with-you>>.

⁵⁶ In Canada see Statistics Canada "Police Reported Crime Statistics" 2010 online <<http://www.statcan.gc.ca/pub/85-002-x/2011001/article/11523-eng.htm#a4>>. In USA see Jennifer L. Truman, US Department of Justice, Bureau of Justice Statistics, "National Crime Victimization Survey: Criminal Victimization Survey" 2010 online <<http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=2224>>; which do not include the incidents of sexual assault that are not reported to police.

⁵⁷ *Canadian Criminal Code* s.271.

consented, but by words or conduct withdraws the consent.⁵⁸ A complainant cannot give consent when unconscious, because the complainant's ability to withdraw consent is a requirement of consent.⁵⁹ The accused must have known, been reckless, or willfully blind as to whether or not the complainant consented.⁶⁰

Sexual assault law in the US is similar to Canadian law, but some elements vary by state. In general, some states require that to establish sexual assault, the victim must experience "forcible compulsion" or "incapacity to consent", while most states require the victim's lack of consent without the need to prove force or incapacity.⁶¹ The government must show that the defendant acted purposely, knowingly, or recklessly. Rape and sexual assault are also criminalized under the Model Penal Code, and the victim need not show proof of resistance.⁶² Similarly to Canada, most states define consent in a way that requires the victim to be able to withdraw consent at any time.⁶³

In order to recognize when consent is being given or withdrawn, any person initiating a sexual act must pay attention not only to their partner's words, but also actions. Refusal to engage in sexual acts lies on a broad spectrum, and can take almost any form, short of verbal expressed consent. Identifying when consent is given or retracted is a complex and socially engaging exercise that hinges on communication between those involved.⁶⁴ In sexual assault

⁵⁸ *Canadian Criminal Code* s.273.1.

⁵⁹ *R v JA* 2011 SCC 28, [2011] 2 S.C.R. 440.

⁶⁰ *R v Ewanchuk* [1999] 1 S.C.R. 330 and *R v JA* 2011 SCC 28, [2011] 2 S.C.R. 440.

⁶¹ Decker and Baroni "No Still Means Yes" *The Journal Of Criminal Law & Criminology* Vol. 101, 4 at 1081; See also Model Penal Code art. 213, introductory n. (Official Draft and Revised Comments 1980) at s.214.4.

⁶² See *Criminal Code*, s.213.4 and 213.1.

⁶³ See *re John Z*, 60 P3d 183, 184 (Cal. 2003), holding that a "withdrawal of consent [during intercourse] effectively nullifies any earlier consent and subjects the male to forcible rape charges if he persists in what has become nonconsensual intercourse"

⁶⁴ Matthew Lyon, "No Means No?: Withdrawal of Consent During Intercourse and the Continuing Evolution of the Definition of Rape" 2004, 95 *Journal of Criminal Law and Criminology* 277.

trials, juries may need to be briefed in order to eliminate myths and gender stereotypes and prevent them from analyzing the trial according to social bias.⁶⁵

Sex robots further distort the meaning and importance of consent in a sexual act. They embed the idea that women are passive, ever-consenting sex objects, and teach users that when getting consent from a woman, “only no means no”.⁶⁶ Sex robots cause harm because they provide the user with an illusion of a mutual sexual experience, while also further alienating them from society and normalizing dehumanization of women.

Harm to the User

If you can recall the first time you spoke to a person you had feelings for, you may also remember fear of rejection, feeling nervous, having sweaty palms, heart pounding, and an odd inability to form coherent sentences. In time, through socialization, some people overcome the initial anxiety that comes when interacting with someone you are interested in. In relationships, individuals also learn how to empathize, compromise and communicate with others. Though at times challenging to learn, social skills are required to maintain romantic relationships as well as friendships. The existence of sex robots will mean that men engage “women” without having to experience social discomfort. Instead, men can turn to their “robot lover”, who does not present them with any challenges or uncertainty.⁶⁷

Harm to the individual user is caused by repeated exposure to a dehumanized form of sex and intimacy. Negative effects include alienation and seclusion from society, stunted emotional development, and an inability to compromise or handle rejection. A person’s need for sex with a

⁶⁵ Patricia Tetreault, “Rape Myth Acceptance: A Case for Providing Educational Expert Testimony in Rape Jury Trials”, 1989, *Behavioral Sciences and the Law*, Vol. 7, No. 2, pp 243-257.

⁶⁶ Celia Kitzinger and Hannah Frith “Just say no? The use of conversation analysis in developing a feminist perspective on sexual refusal” 1999, *10 Discourse and Society* 3 at 293.

⁶⁷ Blay Whitby “Do you want a Robot Lover? The Ethics of Caring Technologies” at p 256 in *Robot Ethics* by Patrick Lin, Keith Abney and George Berkey 2011 eds.

robot could suggest a sign of physical and emotional withdrawal from efforts to connect intimately with humans. User's repeated interaction with sex robots will solidify antisocial habits and confirm their fragility and unwillingness to overcome personal social challenges.⁶⁸

If human-robot relationships are indeed the future,⁶⁹ there is a risk that what will begin as a means to provide companionship to individuals unable to communicate or build relationships with women, will in time reinforce antisocial tendencies. Overcoming anxiety or learning to accept and compromise are learned social behaviours, essential to maintaining romantic relationships with women.

In *My Sex Robot*, the fembot enthusiasts said they were especially drawn to the idea that sex robots would not challenge them in the way that a human relationship would, and preferred sex robots as less emotionally risky entity. They expressed discomfort at the idea of interacting with women, and shared stories where their feelings were hurt because women rejected them.⁷⁰ One of the men featured acknowledged he had trouble engaging women romantically after a difficult breakup, and stated that being with a sex robot is "better than seeing a shrink."⁷¹ Another man featured in the documentary said that sex robots meant "being with somebody without all the strings that come attached to being with another person."⁷² One went as far as saying he would see himself falling in love with a robot, "because that companion is all that I

⁶⁸ Matthias Scheutz "The Inherent Dangers of Unidirectional Emotional Bonds between Humans and Social Robots" p216 in *Robot Ethics* by Patrick Lin, Keith Abney and George Berkey 2011 eds

⁶⁹ David Levy, "Love and Sex with Robots" 2008 New York: HarperCollins argues that robots will become the desired form of life partner by 2050 p.22.

⁷⁰ Dough Hines, "My Sex Robot" documentary, SBS online <
<http://www.sbs.com.au/documentary/program/737/My-Sex-Robot>>.

⁷¹ Interview with Delosian, in Dough Hines, "My Sex Robot" documentary, SBS online <
<http://www.sbs.com.au/documentary/program/737/My-Sex-Robot>>.

⁷² Interview with Keizo in Dough Hines, "My Sex Robot" documentary, SBS online <
<http://www.sbs.com.au/documentary/program/737/My-Sex-Robot>>.

would want in a person; and that companion is someone that would want me.”⁷³ These statements suggest that sex robot enthusiasts desire a completely submissive, ever-consenting partner. A sex therapist featured in the film believed that relying on a sex robot for emotional and physical companionship might cause unhealthy relationships with real women.⁷⁴ If users are motivated to use sex robots by an inability to interact with women, or worse, out of personal hostility against women, their problematic inability to communicate, be vulnerable or create meaningful relationships with other people is reinforced and accommodated.

It is possible to imagine that sex robots may have the potential to help reintegrate antisocial individuals, by providing a safe environment for users to gain comfort and familiarity with “women”. This idea was depicted in the movie *Lars and the Real Girl* where an introverted individual believed a blowup doll named Bianca was his girlfriend. Once he felt ready to integrate into society, he created an illness that led to Bianca’s “death”.⁷⁵

Although it was an effective approach to a Hollywood film, sex robots are unlikely to help antisocial users better interact with women. It is doubtful that an individual who does not feel accepted in society, and who finds an alternative way to meet their exact needs for companionship will, for some reason, want to integrate back into society, where they can risk rejection and face social discomfort. Moreover, a person who has learned from a sex robot how to interact with women may pose further dangers to women. For example, violent acts carried out with sex robots could be seen as acceptable by the user, potentially leading to increased violence against women.

⁷³ Interview with Keizo in Dough Hines, “My Sex Robot” documentary, SBS online <<http://www.sbs.com.au/documentary/program/737/My-Sex-Robot>>.

⁷⁴ Interview with Dr. Martha Hellisen, in Dough Hines, “My Sex Robot” documentary, SBS online <<http://www.sbs.com.au/documentary/program/737/My-Sex-Robot>>.

⁷⁵ Craig Gillespie, director, “Lars and the Real Girl”, 2007.

Sex robot enthusiasts may argue that in an individualistic, capitalist society, they have a personal choice whether or not to overcome antisocial tendencies or retreat from society. The problem with this argument is that discomfort or disappointment with individuals or society does not justify withdrawing from such interactions. Overcoming personal challenges is difficult, and the payoffs are only experienced after great effort has been spent to address problems. If sex robots offer a substitute to human companionship, then human interaction might become a rarity. Men have meaningful contributions to make in interacting sexually and intimately with women in society. This value will be diminished if men who feel challenged can simply retreat from intimacy with women.

Another danger is that designers, programmers or distributors of sex robots could commercially manipulate users' emotional bonds with the sex robot.⁷⁶ On a subconscious level, humans are unable to distinguish between relationships formed with social robots and those formed with people, animals or otherwise alive agents.⁷⁷ User's ability to form unidirectional social emotional bonds with social robots raises concerns about how sex robots can be used by companies to exploit users into purchasing products or adopting certain beliefs.⁷⁸ People can feel strong empathy and emotion towards interactive robots that can imitate intelligence and affection.⁷⁹ When the robot becomes a sexual and emotional companion, human susceptibility to being manipulated is left in the hands of roboticists, programmers and distributors.

The user is likely to internalize not only what the robot asks, but also how the robot responds. Because sex robots reward any interaction with the user with pleasure, they teach users

⁷⁶ For a discussion on the manipulative effects of social technologies see Ian Kerr, "Bots, Babes, and the Californication of Commerce." 2004, 1 University of Ottawa Law & Technology Journal 285.

⁷⁷ Matthias Scheutz "The Inherent Dangers of Unidirectional Emotional Bonds between Humans and Social Robots" p215 in Robot Ethics by Patrick Lin, Keith Abney and George Berkey 2011 eds

⁷⁸ Matthias Scheutz "The Inherent Dangers of Unidirectional Emotional Bonds between Humans and Social Robots" p215 in Robot Ethics by Patrick Lin, Keith Abney and George Berkey 2011 eds

⁷⁹ Consider Watson on Jeopardy and how everyone was cheering for the "intelligent" robot. See "Meaning of Watson" Ian Kerr 19 February 2011 Ottawa Citizen.

what sex and intimacy is. By learning that sex robots do not require consent and have no personal needs or desires, users can falsely attribute these qualities to women. Oppressive and dehumanizing ideas about women get internalized on a subconscious level, even if the user is consciously able to differentiate between his sex robot and women (whether or not the user has engaged violently with the sex robot or otherwise). Repeated interactions with an entity that looks and feels like a woman, is programmed into submission and is ever-consenting, positively reinforce sexist notions that women are sex objects, and affects how the user will interact and perceive women in society. Given the already complex nature of consent, including the wide spectrum of behaviours and words that indicate lack of consent, sex robot users may have trouble identifying when a woman is rejecting sexual advances.

Harm to Women

The Special Committee on Pornography and Prostitution defined harm as material that “represents and nourishes attitudes and activities inimical to the equality of men and women, [which perpetuates] lies about aspects of women’s humanity and denies the validity of their aspirations to be treated as full and equal citizens.”⁸⁰ Although this definition was created with reference to pornography, it also applies to the harm that sex robots cause women. A user’s ability to manipulate sex robots dehumanizes women and promotes lies about their sexuality. Sex robots harm women because they desensitize the user and promote the idea that consent is not a necessary part of a sexual interaction.

Research has shown that exposure of males to violent pornography can cause them to act more violently towards females in their lives.⁸¹ While it is difficult to draw any definitive

⁸⁰ Special Committee on Pornography “Pornography and Prostitution in Canada” Report of the Special Committee on Pornography and Prostitution”, 1985 at p.103.

⁸¹ Kelly Cue Davis, Jeanette Norris et al., “Men’s Likelihood of Sexual Aggression: The Influence of Alcohol, Sexual Arousal, and Violent Pornography”, 2006, *Aggressive Behaviour*, Volume 32, pages 581–589 (2006).

conclusions regarding a parallel between violent pornography and aggression, courts have held that it is reasonable to hold that dissemination of certain kinds of pornography directly and indirectly harms women.⁸²

A glance at magazine newsstands, album covers, music videos and ads show that women are already sexualized and objectified by their environment.⁸³ Sex robots, by their very design, encourage the idea that women are subordinate to men and mere instruments for the fulfillment of male fantasies. This type of harm has been explored in the context of pornography and is reproduced in the harm caused by sex robots. Like pornography, use of sex robots sexualizes rape, violence, sexual harassment and prostitution and eroticizes “dominance and submission ... common to them all.”⁸⁴ Sex robots further enhance the harms posed by prostitution by presenting them all in one interactive, customized, obedient entity. Sex robots reinforce user’s sexist ideas about submission and power through a physically rewarding process. They represent a form of obscenity that is direct, intimate and likely to elicit changes in societal beliefs and attitudes.⁸⁵

Sex robots present a loophole to laws that prevent people from engaging in rape, sexual slavery, prostitution and violent pornography. While some proponents of sex robots may argue that sex robots are not women and thus no harm can arise, one of the greatest harms to society is the overall long-term damaging effect on women’s self image and societal worth. The use of sex robots reduces women to a purely sexual purpose and submissive state. Sex robots positively reinforce the belief that women are a means to an end, as opposed to men who are seen as being means within themselves. In time, women might be expected to conform to standards of sexual

⁸² See *R v Butler* [1992] 1 SCR 452 and *Miller v. California*, 413 US 15, 24 (1973).

⁸³ Helen Longino, “Pornography, Oppression and Freedom: A Closer Look” 1980 in “The Problem of Pornography”, 1995, Susan Dwyer ed. California: International Thomson Publishing p. 39.

⁸⁴ Catharine MacKinnon, “Francis Biddle’s Sister” Pornography, Civil Rights, and Speech” 1987 in “The Problem of Pornography”, 1995, Susan Dwyer ed. California: International Thomson Publishing p. 39.

⁸⁵ Susan G Cole, “Power Surge: Sex, Violence & Pornography”, 1995, Second Story Press at p. 90.

availability set by sex robots, socially limiting their autonomy in sex and intimacy and eroding the existence of mutual consent.

Future Steps: Regulation, not Prohibition

“The significant problems we face cannot be solved by the same level of thinking that created them.”⁸⁶ The problems posed by sex robots originate in century-long efforts to suppress and silence human sexuality. As discussions about sexuality emerged from the private to the public, governments and courts became more aware of the harms caused to women. Although we are far from identifying and addressing the cause of female sexual oppression, discourse and social movement has made us more aware of its existence.

Sex robots are harmful. They risk detrimental harm to users, women in society, and to societal perceptions of consent. Sex robots allow men to experience sex with what essentially is a female sex slave. However, this harm is a symptom of a deeper societal problem. Banning sex robots will not only create an uncontrollable black market for sex robots, but will block research and discussion about the direction that human sex and intimacy is heading.⁸⁷

A number of competing interests also suggest that regulation is preferable to prohibition. The first is the freedom of expression or speech in creating, distributing or displaying sex robots and the need to encourage innovation. Second, in order to dispel beliefs and practices that are harmful to women, dialogue and research about human sexuality and intimacy must be facilitated.

Arguments about freedom of expression would likely mirror ideas found in pro pornography debates. In Canada, freedom of expression is protected under s.2 of the *Canadian Charter of Rights and Freedoms*. In US freedom of speech is a right under the first

⁸⁶ Alice Calaprice ed., 2011, “The Ultimate Quotable Einstein” New Jersey: Princeton University Press.

⁸⁷ Michel Foucault, *The Will to Knowledge, The History of Sexuality Volume 1*, 1998, Hurley, R., trans., UK: Penguin Books.

Amendment.⁸⁸ However, freedom of expression in pornography has been limited by the courts, and does not include a right to obscene works. Given the direct interaction with sex robots, and potential for emotional manipulation, it is likely that courts will find the harm caused by sex robots to surpass that of obscene pornography, and uphold laws that aim to regulate. Linked to the freedom of expression, although not a constitutionally protected right, is the freedom to innovate. Regulation could still accommodate the freedom to create and innovate, while controlling the use or design of sex robots to minimize harm.

Sexuality is socially constructed.⁸⁹ It is therefore possible, as a society, to alter sexist notions about sexuality and intimacy through research and discourse. Discourse about sexuality must involve dialogue about method, power, class and law.⁹⁰ Most importantly, discourse about sexuality must involve discussion about gender.⁹¹ Sex robots could provide an opportunity to understand and correct violent and demeaning attitudes towards women. If regulated, sex robots could provide a means of researching the roots of sex and intimacy for both genders, demystifying female sexuality, and addressing the roots of women's oppression.

Regulation could entail compelling sex robot creators to design the robots a certain way, or to create regulated "sex robot brothels." Another alternative or accompanying approach could be to apply civil tort action to sex robots. Heart balm torts, used in the US to hold a third party responsible for interfering in a protected relationship, could allow the partner of a person who is using the robot to claim damages. If a spouse's use of a sex robot leads to the dissolution of the

⁸⁸ *The Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (U.K.), 1982, c. 11. [*Charter*] s.2 and the US Bill of Rights 1st Amendment.

⁸⁹ Catharine Mackinnon, "Sexuality, Pornography and Method: Pleasure under Patriarchy", 1989, *Ethics* 99 (2) p. 314-346.

⁹⁰ Michel Foucault, *The Will to Knowledge, The History of Sexuality Volume 1*, 1998, Hurley, R., trans., UK: Penguin Books.

⁹¹ Catharine Mackinnon, "Sexuality, Pornography and Method: Pleasure under Patriarchy", 1989, *Ethics* 99 (2) p. 314-346.

marriage, their partner can claim damages against the programmers, designers and/or distributors of sex robots.⁹²

Identifying the harms only scratches the surface of the sex robot phenomenon. Input from women's groups, legal practitioners, academics, as well as roboticists is required in order to canvass applicable solutions and identify the most appropriate methods of regulation.

Conclusion

The fact that sex robots are entering our free market speaks volumes about the direction that humanity may be heading into. Dehumanized sex and intimacy, unidirectional emotional bonds, and the illusion of love might be our future. Sex robots threaten the notion of consent in sexual interaction by socially alienating users and dehumanizing women. They breathe life into the ancient fantasy of giving men full sexual and emotional control of "perfect" women. This paper only begins to scratch the surface of how sex robots will affect society and what solutions will effectively address these harms.

Human sexuality is a complex and sometimes uncomfortable phenomenon. Sex robots offer the illusion of power and love as a response to these issues. Unfortunately, such an approach will end up exacerbating serious societal problems. Sex robots appear to simplify human sexuality by allowing the user to program the ideal sexual and emotional companion. These androids are indistinguishable from women, programmed into sexual submission, without the ability to complain, challenge or refuse the user. Sex robots are problematic because they circumvent user's need to establish consent. Users are taught by positive reinforcement that women are sexual objects and that consent is not important. Women are in turn harmed by patriarchal, oppressive and demeaning ideas reinforced by the use of sex robots.

⁹² Sonya Ziaja, "Homewrecker 2.0: An Exploration of Liability for Heart Balm Torts Involving AI Humanoid Consorts", Lecture Notes in Computer Science, 2011, Vol 7072, p 114-124.

AI has the potential to greatly transform our society. Because technology is inherently political, we must be careful about the choices we make regarding its use and design, in order to ensure that the transformation is for the better. As a society, we must not let ourselves be blinded by superficial depictions of the “perfect” intimate partner. Instead, we should seek to apply technology in a way that enhances what is valuable and “rare”, without the need to resort to any “false compare.”⁹³

⁹³ William Shakespeare, Sonnet 130.