AI and Sex Robots:

An Examination of the Technologization of Sexuality

By Keif Godbout-Kinney

A Thesis Submitted to Saint Mary's University, Halifax, Nova Scotia in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Women and Gender Studies

November 2020, Halifax, Nova Scotia

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Abstract

The emergence of sex robots with rudimentary but slowly advancing AI is a relatively new phenomenon, and there is little understanding about what the possible implications of these automatons could be, particularly regarding their impact on human sexuality. Drawing on a number of media sources, this paper looks at AI and sex robots, specifically how they function as a means by which a certain kind of sexuality is constructed and maintained. The specific sources are the movies A.I. Artificial Intelligence (2001), Ex Machina (2014), and Blade Runner (2007), and the television adaptation of Westworld (2016). I look at this relationship of sexuality and technology and the ways it has shaped not only how each of these categories are viewed in relation to each other, but also the ways that they have had a direct impact on the development of social practices. Specifically, I am interested in the ways sex robots could be used to reinforce harmful gender stereotypes about women, and lead to sexual violence. This project aims to fill this gap in the literature around the topic of sex robots, with the approach being theoretical in nature due to the lack of empirical data on the subject.

November, 2020

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Chapter 1 – Introduction and Grounding

Building a Frame

In recent years anxiety has mounted surrounding the question of robots and their place in society, partially because of the increasing ubiquity of robots and concern about how this will impact human relations (Richardson, 2015, p. 1). Kathleen Richardson, Professor of Ethics and Culture of Robots and AI at De Montfort University, and one of the founders of the Campaign Against Sex Robots, specifically terms this feeling "annihilation anxiety," saying that, "annihilation anxieties are produced by an analytical position that rejects ontological separations, combined with radical anti-essentialism – when humans and nonhumans become comparable" (p. 5). It is easy for me to understand this form of anxiety when I think about how robots are being incorporated into society: thousands of construction jobs, for example, have been lost to automation on assembly lines; automated self-checkout lines have begun to replace cashiers; even surgeons are being replaced with robotic surrogates that are marketed as precise and reliable (Brown, 2012; Arntz, Gregory, & Zierahn, 2018). It seems that advances in technology are modifying many aspects of social, economic, and political life. What is the future of humanity in an increasingly automated present?

When I imagine how robots will shape society, it is easy to conjure scenes of a technological utopia similar to what has been imagined in *Star Trek* (Roddenberry 1986, 1987), *The Jetsons* (Hana & Barbera 1962), or even *The Expanse* (Fergus, & Ostby, 2015), where technological advancement has untethered people from a wage, and freed them to work for the betterment of humanity. Technologies represented in science fiction texts can be tools to examine real-world social and political landscapes and technologies

(Belsamo, 2000; Caine et al., 2016; Czarniawska, 2007; Freedman, 2013; Grebowicz & Merrick, 2013; Haraway, 2004; and Kara, 2013). The increasing ubiquity of automation and robotics has translated into a growing field of intellectual inquiry that questions the effects of technology on areas of social life, such as warfare (Danielson, 2011; Johansson, 2011; Pagallo, 2011; and Weiss, 2011) or sexuality (Levy, 2008; Richardson, 2016a, 2016b, 2016c; and Sharkey et al., 2018). The question of how advancing technology changes power dynamics and social structures is an engaging and vital topic and is where this research begins.

I have been circling this topic in different forms since I began my MA work at Saint Mary's University. Initially, I looked at science fiction literature and representations of gender, thinking about science fiction as a critique of contemporary social and political landscapes. Science fiction is a genre that allows for the examination of social inequalities vis-à-vis allegorical narratives. I intended to look at how Indigenous and Black science fiction writers create space to re-imagine futurities outside of the context of the settler-colonial state (Carrington, 2016; Hopkinson & Mehan, 2015; Valnes, 2017; Van Veen, 2013; and Womack, 2013), as well as looking at different ways that race, gender, and sexuality have been represented in science fiction. My interest was still clearly quite broad and vague at that point; I did not yet have a clear vision of what it was I specifically wanted to examine.

It was at the Cyborg Futures Workshop, organized by Dr. Teresa Heffernan in April 2017, that I finally arrived at my present thesis topic. This workshop was a weekend-long exploration of the social, ethical, and political implications of artificial

¹ Noel Sharkey is better known for his work campaigning to stop the rise of killer robots. See https://www.stopkillerrobots.org/media/ for more.

intelligence and robotics. It brought together an interdisciplinary group of scholars to discuss a range of questions such as, "should robots be afforded ethical considerations" or "how can humans understand ourselves through the construction of artificial bodies"? One of the workshops, given by Dr. Kathleen Richardson, focused on sex robots and how they can negatively impact human-human relations in ways that perpetuate violence against women. Her lecture brought together the disparate yet interrelated theoretical pieces that I had been juggling up to that point. It solidified what it was that I wanted to study, which I will detail now.

In this thesis, I look at AI and sex robots, asking how sex robots help to maintain a heteronormative, sexist model of sexuality, by reinforcing gender stereotypes. I also discuss the relationship between sexuality and technology and ask how this relationship has impacted the development of social practices (Foucault, 1990, p. 91). I do this, first, by examining the relationship between sex robots and gender-based violence in the films *Ex Machina* (Garland, 2014) and *Blade Runner* (Scott, 2007). I then expand this inquiry into the question of ethics. I ask how the textual constitution of robots invites considerations about the discursively constructed limits of the human, and how these relate to issues of control in *A.I. Artificial Intelligence* (Spielberg, 2001), and violence and disassembly in *Westworld* (Nolan and Joy, 2016).

Notes on Terminology, Language Usage, and Locating the Author

Let me begin with the term's "women" and "men," which I use in the binary sense, while acknowledging that gender is a construction and people are not essentially / binaristically gendered (Butler, 1990). I have chosen to do so, and to use gendered

pronouns to refer to the robots in the films I analyze, because the films position us, at least to some degree, to read them as women and / or men. I draw the reader's attention to this to highlight, in part, the blurring of the line between robots and humans in these films. In my analysis, I read the characters as cisgender men/women; there are, of course, spaces for other interpretations.

This work is influenced by David Levy and Kathleen Richardson's writings, which appear to employ the terms woman and man as monolithic categories rather than treating them with more nuance. Some of the views about gender and sexuality expressed by Levy and Richardson are problematic and do not reflect my own, but they are recounted here in the context in which they are set down in the works by those authors. While it is possible that Levy might be unaware of the critical literature on gender and sexuality, Richardson is aware but chooses not to use more critical terminology, providing justifications for doing so (Richardson, 2016b, p. 290). Let me give as an example Richardson's views around sex work, which she refers to as "prostitution," a term not accepted by those in the field of gender and sexuality studies. I support sex workers' rights and the decriminalization of sex work. I recognize that for some, sex work is a career and that many in the industry, even if engaging in "survival sex," resent the implication that they would not do the work if they were more "aware of their oppression." However, when I present Richardson's work, I use the term "prostitution" (or "prostitute") as it has been used by the author (Richardson, 2016a; & 2016b). I also want to add that, in the works I draw upon, one of Richardson's primary concerns is with sex trafficking, ² in keeping with the legal scholar MacKinnon³.

² I will expand more on this in the proceeding section specifically on Richardson.

³ See for example MacKinnon, 1989 or MacKinnon and Dworkin, 1998.

A sex doll⁴ is a category of sex toy or masturbatory aid that resembles a human form (generally feminine). They are typically constructed from silicone but have been made from a variety of materials like cloth, rubber, or metal. They sometimes contain moving parts, such as vibrating or lubricating genitalia, and can be articulated into a variety of positions. Sex robots, by contrast, do not have a widely agreed-upon definition. For this project, I draw on Richardson's (2016a) definition of sex robots as mechanical devices similar to sex dolls that often, but not always, resemble a normative adult ciswoman in their physical construction. ⁵ This material construction usually contains exaggerated and/or eroticized physical features such as an open mouth, large breasts, and a Barbie-like hip-to-waist ratio. However, unlike a sex doll, a sex robot is more sophisticated mechanically, able to move using motors and servos⁶ and with sensors that respond to outside stimuli.

Some sex robots also contain artificial intelligence (AI) that allows them to communicate with people. Currently, this takes the form of relatively simple "chatbot" algorithms that simulate conversation by searching for keywords in the input (i.e. text or speech), and then draws upon a database of matching key words to form a reply (Richardson, 2016a, p. 3). Sex robot technology is quite far off from what we see on TV

⁴Known also as a "blow-up doll" or a "love doll."

Appearance is the most customizable part of buying a sex robot. Options include eye colour, pubic hair (colour and shape), ears (elf or regular), hair, skin colour and makeup. They are of a lifelike height (average around 170cm) but comparatively lightweight, with the heaviest being around 70 lbs. On some sex robots, the faces can be swapped. Current sex robots, like their sex doll cousins, are made from silicon rubber and are advertised as being "warm to the touch." These robots are equipped with all over body sensors so that they can respond to touch. Sometimes, the response depends on the chosen personality trait of the sex robot (p. 4).

⁵ Sharkey et al. (2018) offer this definition as an alternative to the one employed by Richardson:

⁶A device that allows a mechanism to correct its movements and actions.

or movies: those that exist today are little more than sex dolls with a few added features, such as being able to warm their "skin," respond to the most basic forms of conversation, or move jerkily in an ungainly manner. While there is still a long way to go before a sex robot is developed that possesses an advanced AI⁷ and mechanics capable of allowing it to interact with people in a sophisticated manner approaching some approximation of human behaviour, it is precisely because this is such a new field of technology that it is essential to conduct scholarly research and to ask questions about what the development of sex robots might mean, and what their current development says about gender, ethics, and human relations (Coeckelbergh 2013; Jensen and Blok 2013; Robertson 2007; & Sone 2008). The question that centers this work is: does the commercial introduction of sex robots reinforce harmful gender stereotypes?

Finally, I also must locate myself in this work. I am a white-settler, almost-30 (I was younger when this thesis began), socialized as a heterosexual cis man. I come from a background that would be considered lower middle class. I have no significant history of medicalization or psychiatrization. I do not identify as being disabled. My location, socialization, and upbringing are extremely normative. As such, I recognize that I enjoy a significant amount of privilege, which has impacted my choices for and ability to perform academic work, the way people interact with me, and the expectations placed upon me. I am continually working to recognize and destabilize the effects of my privilege. Still, there will inevitably be times when I fail to do so, and regardless of my intention, my actions do contribute to racist, ableist, sanist, and sexist discourses.

⁷ It should also be noted that, from an industry standpoint, Artificial General Intelligence (AGI), is considered by many to be an AI 'myth', and that if it is ever achieved it will be many years if not decades from now.

On the Relationship Between the Reality of the Robot and AI Industry: Fictions About Robots and Artificial 'People'⁸

This analysis draws primarily on fictional accounts of robots and AI. I have chosen to do this in order to explore the relational boundaries between real objects, that is, actual robot and AI development, and fictional representations, that is, robots and other artificial people in various texts such as books or movies. In order to most effectively do that, I will endeavour to clarify at this juncture exactly *how* I envision this relationship in order to understand the possible implications for this thesis.

The simplest way I understand this relational logic and the way that I employ it in my analysis is to use fiction to explore questions of the human that arise when categories of knowing become troubled by considering what it means to be human in relation to artificial people. The negotiation of this question in fiction primarily serves to explore the boundary of the inside / outside binary and to extend it by posing *who* or *what* creates this differentiation. The artificial people in the fictional texts that I draw upon represent the "outside" in this binary because they are posed as the Other which is how the question of what it means to be 'human' is made known. The boundaries of the human, that is, what is "inside," are made known through a process of negation by declaring that people are *not* something by contrasting them with the artificial people in each text. For example, in *AI* (Spielberg, 2001), there is a scene known as the "Flesh Fair" where obsolete "mechas"

⁸ A note on quotation usage. In this thesis, I employ single quotations "to denote a word that is not being directly quoted from a work, but to trouble it or highlight that it is a contested term. For example, when talking about how David in *AI* 'loves' Monica, I have put this word "love" in single quotations because I am pointing out that this form of affect is a programmed response, so it would not be correct to use it the same way people do.

(what robots are called in AI) ⁹ are rounded up and destroyed to the cheering pleasure of the crowd of people. It is a celebration of the human, of being alive, and the way this is realized is though the destruction of the mechas – an act of negation.

These fictional texts employ representation, allegory, and metaphor as their rhetorical devices, and it is precisely these that allow these questions on boundary formation to be posed, and, in the specific case of the robot and AI industry, it can serve a particular purpose. The desire of the industry can be reflected back upon itself vis-à-vis these fictional representations for two primary reasons. The first is because various texts have served as the inspiration for many technological innovations. It is frequently the case that there is no consideration of larger ethical, social, or political questions in these instances (Heffernan, 2015; 2018). The second reason is because these texts often present a means to affect the very critique that is frequently left out of the aforementioned industry considerations.

I am not adopting this formulation to argue for any kind of robotic rights or to say that fiction should be deployed as sometimes is the case where examples in literature or movies are highlighted to elicit a certain emotion or to implore empathy for a fictional character. To be sure, in the examples that I will highlight there are frequent instances of artificial people being abused in some way, but the abuse is highlighted in order to explore what it means for the *people* delivering the abuse. This opens space for the question of why people are brought up short in the face of this abuse. Two possibilities immediately present themselves, the first being that sex robots are built to resemble humans, and their humanoid form – like the fictions that we read or see on screen – elicits

 $^{^9}$ I will go into more detail about AI in the second Chapter of this thesis.

an empathetic response. The second possibility is that it is the potentiality that people could someday be replaced by sex robots that brings them up short. These will be explored in more detail in the proceeding sections, but at this early juncture I would posit that a synthesis of both creates a more robust position from which to begin.

On the History of Sex Dolls: A Brief Overview

Sex robots go beyond the purpose of serving as masturbatory aids because their construction deliberately emulates stereotypically feminine forms of embodiment.¹⁰ Before sex robots became a subject of the cultural imaginary and the robotics industry, their precursor, the sex doll, already enjoyed an extensive history. This history is important because it helps to locate sex robots culturally, and to consider their impact, both real and potential, to give context for the current state of sex robots.

In his 2010 book, *The Sex Doll: A History*, Anthony Ferguson examines the psychology behind the desire for such objects as, "gynoids and other non-responding sexual partners" (p. 1) and considers how the rise of technology corresponds with sex dolls becoming more widespread. He points out that ridicule of sex dolls is frequent; however, there is also an enduring fascination with them. It is this fascination that he wants to examine (p. 9). Human-approximating artificial constructions for sex (sex dolls) have existed for thousands of years. Two well-known examples come from ancient Greece: one historical and one fictional. The first involves worshippers of the god Priapus (he of the enormous phallus): virginal women would couple with the god's statue to lose their virginity (p. 11). There is also evidence that the phalluses of some of these statues

¹⁰ There is a growing market for male sex dolls; however, the majority are still female.

were detachable, so it is conceivable that these could have served as a kind of proto-dildo (ibid). The second example is from Ovid, 11 specifically the story of Pygmalion, who had a statue sculpted of a beautiful woman, with whom he then fell in love. Aphrodite, seeing Pygmalion's misery because the statue could not return his affection, transformed her into a 'real' woman.

A more modern example would be the dames de voyage (French) or dama de viaje (Spanish); these were cloth simulacra of women that were brought on long voyages by 17th-century sailors who used them for sexual purposes (Ferguson, 2010, p. 16). These are thought to be the precursor to modern sex dolls. There are numerous other historical examples of dolls built for sexual purposes, with the women-as-object and men-assubject relationship arguably present in all of them. For example, French doctors in the 18th century created dolls for men to use sexually; the painter Oskar Kokoschka had a doll replica made of his lover, Alma Mahler, after she ended their relationship; the surrealist Hans Bellmer spent his life creating and refining dolls, ostensibly for his art, but it has also been documented that his inspiration was the sexual desire for his niece, Ursula (p.18-22). 12 According to Ferguson, it is difficult to pin down the specific emergence of the modern sex doll. However, there is a theory (unsubstantiated) that German and Japanese forces developed the first modern sex dolls during WWII (p. 24). Supposedly, Himmler was concerned with the spread of sexually transmitted infections among the men in the German army. In response, he began a project called "Model Borghild" in which a team of experts would create several "gynoids" for sexual use by

¹¹ 2009 translation by Horace Gregory.

¹² See also Sexual Life of Our Time in Its Relations to Modern Civilization by Iwan Bloch (1928).

¹³ Gynoids are manufactured female automatons.

army personnel. The dolls were only to be used for sex; it was not intended that they would become substitutes for love or relationships (ibid).

Ferguson (2010) says that "in the popular mind, a sex doll is an inflatable doll" (p. 29). The first commercially available blow-up sex dolls originated at some point in the 1970s, in Europe (p. 30). From there, they quickly spread in popularity and usage, while developing technologically. In the current market, there are three main types of sex dolls available: 1) the vinyl inflatable doll, priced around USD 50, lowest in terms of quality of materials, artisanship, and realism; 2) the latex doll, a mid-range model priced between USD 150-250, uses higher quality materials and is more realistic in design; 3) the silicone doll, a high-end model, with prices usually beginning around USD 8,000 and only increasing from there. Silicone dolls often have real human hair and realistic features: they have a more lifelike feel to their skin and genitalia, they have detachable parts that make cleaning easier, and articulated limbs that allow them to be moved into different positions (p. 31-3).

Theory and Methodology

In what follows, I use a theoretical lens developed from Richardson's insights, discussed at length in the preceding pages of this thesis. Most significantly, I draw on her definition of a sex robot (2016a, p. 3) and her observations about their problematic, "pornographic representation" (p. 3). I also use her conceptualization—while also drawing from Freedman (2013) and Heffernan (2015, 2018)—of how fiction informs the creation of robots (Heffernan, 2015, p. 2), the "object status" of sex workers (Richardson, 2016b, p. 291), and annihilation anxiety (Richardson, 2015, p. 1). This framework allows

me to examine the relationship between technology and sexuality to argue that the current ways sex robots are represented in popular culture reinforces harmful gender stereotypes and relations. The main textual elements I interrogate in the chapters that follow are the gendered ways robots and their sexualities are constructed and how humans are represented as using them. Ultimately, I show that problematic portrayals of gender are central to these mediated representations of sex robots. The interrogation of these portrayals is vital because they are part of a cultural imaginary that impacts real-world understandings of gender, sexuality, women's bodies, and consent.

In my critical reading of film and televisual texts about sex robots, I draw on the tension between the viewpoints articulated by Richardson and Levy. While I do not entirely agree with either of them, I see this binary as representative of a central, critical tension in this type of research. A limitation of this framework is that it does not allow for an intersectional approach to this question of sex robots because both Levy and Richardson treat the categories of "men" and "women" uncritically, with no discussion of race, disability, age, and so on. While it is beyond the scope of this work, an intersectional approach to the question of sex robots is necessary and should be taken up in the future.

The method I employ is critical textual analysis. Critical textual analysis is a form of "rhetorical critique," and is a method that seeks to "describe the content, structure, and functions of the messages contained in texts" (Frey, Botan, & Kreps, 1999, p. 231). This method was selected because it allows researchers to speak about, and interpret, the characteristics of media texts (p. 229). I selected media texts as the focus of my analysis because I am interested in "describing, analyzing, interpreting, and evaluating the

persuasive force of messages embedded in texts" (ibid) in order to better understand the social and cultural meanings of sex robots currently in circulation. These texts are a way to explore how meaning is formed in the cultural imaginary, and how it can be used as a way to delineate, but also trouble, categories of knowledge about what it means to be human.

My data set represents a group of texts that were chosen because they involve artificial humanoids that are gendered in specific ways, or that are represented as having been developed for some kind of sexual functionality. After taking notes on the way gender and sexuality of both humans and robots are constructed / employed in these texts, I began my analysis, using a Richardsonian theoretical framework, to consider the central questions about gender, sexuality, and representation that form the core of this work.

Chapter two examines the movies *Ex Machina* and *Blade Runner – The Final Cut*, and *A.I. Artificial Intelligence*. Chapter three centers the 2016 television version of *Westworld*, specifically season one, subtitled "The Maze." Both chapters are concerned with how science fiction and the AI and robotics industries have become "entangled" or collapsed (Heffernan, 2015, p. 72). Science fiction serves as the source of inspiration for many developments in robotics and AI (ibid). It also allows for a critique of contemporary social and political landscapes in ways that are sometimes more difficult for literary fiction, and thus is particularly apt to provide critiques of the status quo (Freedman, 2013, p. 87). In the entanglement of science fiction with industry, that essential critique is erased as the industry seeks inspiration from science fiction sources without engaging with the critical aspects of those sources. It is thus vital that when we interrogate sex robots, we return to their science fiction roots with a critical lens, re-

visiting the critical social and ethical critiques the texts perform. However, I tend to argue that the texts offer a normative conceptualization of gender and sexuality in many instances, so while I am drawing on science fiction to affect a political critique, there are still readings of them that can be misogynistic and queer phobic by today's standards. Science fiction can reveal the limits of power by examining who are the "big" writers and whose worlds they represent. I highlight this where apparent in the texts.

Each of the aforementioned texts features as its primary focus an artificial construct resembling a human: an AI in a robot body who must prove to her human creator and captor that she is sentient (*Ex Machina*); replicants who seek to escape lives of servitude and labour, and being bound to bodies designed to expire after several years (*Blade Runner*), and mechas who are designed to take on physically intensive roles and emotional labour roles once held by people in an environmentally devastated world (*A.I. Artificial Intelligence*). Chapter Two looks at representations of different possible roles for robots, such as the role of intimacy. It queries how their gendered construction is indicative of and reinforces problematic gender stereotypes, for example, that sex robots function as a stand-in for human women, reinforcing the patriarchal desire for women's bodies that are always available for men's consumption.

Westworld, the focus of Chapter Three, is a TV series based on the Michael Crichton movie from 1973. A generic hybrid of the science fiction and western, the series imagines a futuristic world where theme parks filled with robotic "hosts" allow guests to live out their every desire, which often includes raping and murdering the robotic denizens of the park. Westworld was selected as the focus for this chapter for several reasons. It is a contemporary work that approaches current themes, issues, and trends.

Because it is recent, it presents a closer approximation of available technology than we see in earlier texts. This chapter addresses the questions: "can robots be raped?" and "can robots be murdered?" I argue that when one is interacting with an object / robot that is almost indistinguishable from a person, ¹⁴ a plethora of moral and ethical considerations about the status of that object are raised.

Feminist Ontology and Genealogy: From the 'Porn Wars' to Post-Humanist Feminists/isms Engagement with AI¹⁵

This section begins with a discussion of feminist ontology to more properly situate this thesis and establish a meaningful genealogy. By "genealogy," I specifically mean that I am going to situate my arguments and the Richardsonian framework I develop within a broader context of preceding feminist work beginning with the so-called 'porn wars' of the 1980s, and then moving from there to the campaign against sex robots vs sex-positive technology usage as a kind of 'updated' version of the debate. In establishing this genealogy, I am guided by the following conceptual question: the pornography industry – a multi-billion-dollar industry, essentially 'won' the porn wars¹⁶, so, what are we to make of this new debate between the aforementioned anti-sex robot side and the sex-positive technology side, specifically in the context of this new industry of sex robots?

¹⁴ Such as being able to pass the Turing Test. The Turing Test is a test to determine if a machine can display intelligent thought equal to or at least indistinguishable from a human. It was developed by Alan Turing, a British computer scientist, in 1950 (Wikipedia, 2019).

¹⁵ This section is a new post-thesis defence addition requested as part of the minor revisions that are necessary. The reader will notice that this section is a little richer in footnotes, the reason for this has to do with practicality. Part of this section is drawn from an earlier draft of this thesis that was about 3x the length it appears here. In order to meet the page requirements and not go over, I elected to include the most necessary sections (edited, of course) and included the rest as footnotes where relevant.

¹⁶ I will go into more detail on this in the proceeding pages.

The Porn Wars, also known as the Feminist Porn Wars, Feminist Sex Wars, or the Lesbian Sex Wars, were a series of debates between anti-porn feminists and sex-positive feminists that took place in the 1980s and centred on sexuality and sexual activity (Cornell, 2007 and Jain, 2015) ¹⁷. The debates were primarily focused on pornography, erotica, sex work, lesbian sexual activity, the role of trans women in the lesbian community, and S&M with the debates on pornography ¹⁸ being incredibly divisive (Duggan & Hunter, 2006; Gerhard, 2001; Hansen & Philipson, 1990; and Leidholdt & Raymond, 1992). I begin with the Porn Wars because the arguments regarding pornography from the anti-porn feminists are startlingly similar to the arguments made by those against the use of sex robots, like Richardson. ¹⁹

In simplest terms to not take up undue space on a well-known and well-documented debate, MacKinnon and Dworkin²⁰ argued that pornography reduced women to objects whose only purpose was to provide sexual gratification for men in power (Dworkin, 1981, p. 113; and MacKinnon 1994, p. 176)²¹. This objectification is achieved

¹⁷ One of the more damaging aspects of the anti-pornography movement involved the stigmatization of minorities. Ferguson (1984) says that the "moralism of the radical feminists stigmatizes sexual minorities such as butch / femme couples, sadomasochists, and man / boy lovers, thereby legitimizing 'vanilla sex' lesbians and at the same time encouraging a return to a narrow, conservative, 'feminine' vision of ideal sexuality" (p. 107). Pornography would allow these minority groups greater freedom to practice alternate forms of sexuality.

¹⁸ MacKinnon and Dworkin defined pornography as "the graphic sexually explicit subordination of women through pictures or words" (MacKinnon, 1994, p. 176).

¹⁹ I want to quickly add that I am not aligning myself with or endorsing the position taken by those like MacKinnon and Dworkin. My purpose here is to draw a genealogical through-line from the debates taking place in the Porn Wars to those now involving sex robots. Richardson's particular brand of feminism most closely aligns with MacKinnon and Dworkin's, hence the connections I make.

²⁰ I take MacKinnon and Dworkin to be my primary "stand in's" for representing the position of the antipornography feminists during the Porn Wars. However, I provide ample citations throughout this section of others.

²¹ The anti-pornography feminists argued that pornography is tied to patriarchal power relations between men and women and that these relations were about male authority and control, underpinned with the threat and application of force (McBride, 2008; and Willis, 1983). Dworkin (1981) argued that pornography is about male dominance over women, and because of this, it is incredibly harmful to women (p. 15). According to Dworkin, both the production and consumption of pornography is harmful because the production naturally subjugates women and children to men's power and desires through coercive means

through the systematic removal of any form of personhood through increasingly demeaning acts of "degradation and humiliation" that situate women as being lesser than their male counterparts (Dworkin, 1981, p. *xxvii*).

The pro-sex feminists arose in direct response to the anti-pornography feminists. They argued that pornography could function as a way to explore one's sexuality and could be a liberatory expression (McBride, 2008). They criticized the anti-pornography feminists for holding oppressive views towards sexuality, views that were damaging to women's sexual agency (Willis, 2005). Ellen Willis said that "As we saw it, the claim that 'pornography is violence against women' was code for the neo-Victorian idea that men want sex and women endure it" (ibid). Following this logic, pornography can allow for greater sexual expression and an essential critique of the dominant social trends vis-à-vis sexuality. Stereotypes that women only want to have "boring" sex and are not interested in any manner of sexual exploration could be subverted using pornography to show that women had a diverse and robust sexual range and appetite (ibid)²².

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Rubin (1998) discusses the history of sexual panics in America and how sexuality has been categorized into "good" and "bad" types, and what those connotations mean for developing a radical theory

that perpetuate and reinforce heteronormative patriarchal norms. This consumption causes the viewer to internalize these particular norms, and through this process of internalization, men are habituated to accept these misogynistic portrayals of women (p. 113).

MacKinnon (1989b) argues that the economic, physical, and / or psychological coercion of women occurs during the production of pornography even when they are portrayed as enjoying the acts depicted (p. 198-9). This is because a violent model of sexuality is privileged where penetrative sex is used to dominate women who behave as if every act is one of extreme pleasure, and women are seemingly transformed into crazed animals who crave nothing more than to be endlessly satisfied by the males on-screen (Arrowsmith, Greer, Lefevere, & Smith, 2013). But this particular performance is just that, and one that MacKinnon says is achieved through some measure of coercion perpetrated by the men in power (MacKinnon, 1989b, p. 199).

²² One of the major critiques of the anti-porn feminists from the sex-positive feminists had to do with censorship (McBride, 2008). Laws such as the Dworkin-MacKinnon Ordinance were seen as oppressive and would only serve to muzzle women and would have the opposite effect of bringing about a positive social change (ibid). This censorship did not allow for a free and democratic means by which ideas could emerge and would simply continue to stifle women's sexuality, as it had been for years. In fact, it was argued that the views espoused by many anti-porn feminists such as Dworkin and MacKinnon were frighteningly in line with that of the religious right and could actually benefit patriarchal discourses that sought to return to a more traditional model of female sexuality (Boffin & Fraser, 1991, p. 121).

As with all things involving technology, an update is inevitable. The updated version of the Porn Wars, for my purposes here, is the debate between those arguing that sex robots could allow for a greater exploration of sexuality and those saying that sex robots are harmful to human relationality. I connect these two events because much of the spirit of the debates are the same, with the specifics changing from pornography to sex robots. Both have one side arguing against these things because of the harmful effects they say women are subjected to as a result. One side argues that the use of these things could have a potentially liberatory effect on sexuality or some measure of therapeutic application in the case of sex robots. I will just add in an attempt to continue with this idea of an update, that while they are similar, one of the significant differences that is highlighted by Richardson has to do with the material construction of sex robots to resemble a hypersexualized and stereotyped version of women in their form to function in an interactive manner with people. Pornography is similar insofar as it is also hypersexualized and stereotyped, and there is also the connection of norms generated and maintained through pornography that have no doubt informed the creation of sex robots. But pornography differs because there is still a level of removal or abstraction present with it being something viewed or read and not directly interacted with the way sex robots are. So, this is one way that these two debates differ.

The arguments in the preceding paragraphs taken from the sex-positive feminists correspond with those made regarding sex robots, specifically how they could potentially function as a means by which different forms of sexuality could be explored (Barber,

of sexuality (p. 122). For Rubin, sexual liberation is a "feminist goal," and the anti-pornography movement is actually doing great harm to feminism as a whole by attempting to speak for all women and offering what she thinks is a dangerous and limiting critique of pornography (ibid).

2014; Devlin, 2015; and Horn, 2016). Devlin (2015) argues that it could be considered "short-sighted" to ban them altogether because they could allow for new ways that sexuality, sexual identity, and sexual politics could be explored and advanced as well as bringing together sexual minorities and decreasing social isolation.

To go further, Devlin (2018) makes the case, in a manner not so dissimilar from Levy's, that humans are interested in both sexual and romantic relations with inanimate objects, saying that there is a long history of this kind of relationality²³, and it continues to extend with the development of new technologies. Devlin's essential point, as with her previous work, is that there is a potential usefulness for sex robots that should not be dismissed out of hand. That usefulness could take the form of sex robots being utilized for therapies or to explore new dimensions of human sexuality. Many of Devlin's arguments are very similar to those put forward by David Levy and are equally speculative in nature.

The contrasting side of this updated debate follows the same logic as the anti-porn feminists. Many of the debates currently taking place regarding the use of sex robots deal with the same issues brought up during the Porn Wars, such as women's treatment, patriarchal masculinity, and the industrialization of sex. MacKinnon and Dworkin argued that the way women were represented in pornographic acts is oppressive because it reinforces traditional gender roles and maintains patriarchal domination by subordinating women. Richardson (2016b) makes a similar claim involving sex robots when she says that their gendered construction is pornographic²⁴ in nature and serves to commodify

²³ This has been covered in the preceding section on the history of sex dolls, see Ferguson, 2010.

²⁴ And, I would argue her conception of "pornography" is quite similar to the one laid out early by MacKinnon and Dworkin.

women's bodies by reducing them to objects (p. 291).

It was argued that pornography posed a significant threat to women by teaching men to objectify them and that this would encourage misogyny and sexual assault (Dworkin, 1981; and MacKinnon, 1994). The time and context have changed, and the technology has advanced, but many of the more prominent arguments about the way pornography objectifies women and promotes patriarchal control are echoed in arguments against the use of sex robots. This shows that the way sex is commodified using sex robots is related to how it is commodified in the porn industry. As well, the way sex robots are gendered as "pornographic," according to Richardson, displays a coercive desire towards women's bodies and reduces them to a commodity (2016b, p. 291). There is a direct correlation between how pornography was articulated as dangerous and how sex robots are articulated as dangerous because both of these phenomena present dangerous forms of control over female sexuality.

Finally, as well as Devlin's engagement with sex robots, there is the work of post-humanist feminists who touch not specifically on sex robots but on technology and AI developments, which is significant to mention because it is a further development in this same genealogy. I want to briefly now engage tangentially with one. I say "tangentially" because it is to highlight a significant critique of Haraway (1984) and her cyborg feminism, which, though *A Cyborg Manifesto* came before Devlin's work, is quite similar in several ways and important for this analysis. Haraway famously says, "I would rather be a cyborg than a goddess" (1984), and it is this technologism that conjures similarities to Devlin, and also what Julia DeCook critiques. In an excellent article, DeCook (2020) points out how Haraway has been hugely influential in the fields of science and

technology studies and gender and sexuality studies, but that her conceptualization of the cyborg is grounded in a tradition of white western patriarchy. She says that:

...the idea of the cyborg is a seductive one because it would potentially replace all of the fragile parts of our humanity with artificial and indestructible ones, but the epistemic groundings upon which much of science and technology are built upon and of which the cyborg is built upon are fraught with violence (p. 3).

This is particularly important for this genealogy and this analysis because it highlights how technology is primarily controlled and conceptualized in a patriarchal setting. This raises important questions about the ability of many of these technologies, not the least of which are sex robots, to function in any kind of liberatory way or to trouble categories like race, class, or gender. It is primarily the category of gender that will be the focus of this work, which is not to say the critiques of race and class are unimportant, the opposite is true. I want to signal to the reader that I am aware of this, however, such engagements are beyond the current scope of this work vis-à-vis space and time constraints²⁵ and will hopefully be taken up at a future date.

Now that I have established a rough framework to function as a feminist genealogy, there is one more important component before I move into the state of robots in the cultural imaginary. This will take the form of a broad overview of the current state of sex robots in industry, and this is so the reader can have an idea of the level of development of sex robots as well as being able to situate the previous discussions in a firmer materialism.

²⁵ This is, after all, an MA thesis and as such I am trying to keep my focus sufficiently limited and to finish it in a semi-reasonable amount of time (although by this point, I think it's fair to say that last point is completely irrelevant).

On the Current State of Sex Robots in Industry

Matt McMullen, the CEO of Abyss Creations, is the creative force behind RealDolls—known as the "Rolls Royce" of sex dolls—which are high-end, fully customizable sex dolls. While they do not currently have automation or AI functionality, they are accessible and offer a steppingstone for Abyss Creations' RealBotix project, which aims to create a fully functioning, commercially available sex robot. Their approach to realizing this goal focuses on three components: AI, robotic technology, and a virtual reality platform.

The AI component of Abyss Creations is an app available on smartphones and tablets that allows users to create a customizable and unique AI personality for their doll, called "Harmony." Users interact with the Harmony AI through the app, which then begins to learn about their interests and personalities. As Harmony learns, the app is updated, and the experience is supposed to become "more engaging and authentic" (Sharkey et al., 2018, p. 32). The robotics component is an advanced version of the current RealDolls. Abyss's goal is to integrate advanced technological components into their human-like sex dolls, which will allow them to move independently, control their body temperature, and respond to stimuli. Once the technology has been perfected, the goal is to integrate the Harmony AI with the robotic RealDoll. Currently, Abyss is working on an advanced head, equipped with sensors and motors that allow it to move and react to external stimuli (ibid). The virtual reality (VR) component of RealBotix creates a simulated virtual environment, tailored to the user, where they can interact with the Harmony AI. Harmony is intended to function across all three spaces: an interactive smartphone app, a fully articulate sex robot, and a virtual reality experience.

TrueCompanion, run by CEO Douglas Hines, claims to have created the world's first sex robot in 2010. Named Roxxxy Gold, she comes with three different settings: 1)

Frigid Farah: "shy and reserved, requiring some coaxing and seduction"; 2) Wild Wendy: "outgoing and adventurous," and 3) S&M Susan, for those users into an "unconventional experience" (Sharkey et al., 2018, p. 4). Roxxxy debuted at the Las Vegas Adult

Entertainment Expo in 2010, but robot enthusiasts were disappointed by her performance.

According to Owsianik (2017), many participants said Roxxxy's abilities had been exaggerated, and few models were sold. TrueCompanion has a male version of Roxxxy called "Rocky Gold," available for pre-order. However, there has been significantly less attention paid to Rocky than Roxxxy in the popular press (Owsianik, 2017). According to those in the industry, male-appearing sex dolls are not as common as their womenappearing counterparts, although demand appears to be increasing (Sharkey et al., 2018, p. 3).

Synthea Amatus, a Barcelona-based company headed by Dr. Sergi Santos, focuses on the integration of nanotechnology and AI with "material science" ("Intelligent Sex Dolls," n.d.). Samantha is their flagship sex robot, and she comes with several features such as different levels of sexuality (e.g. a setting where she needs to be "seduced romantically"), a "Call for Attention" algorithm that allows her to synchronize with a client's level of attention, advanced memory and analysis functions that continue to develop the more she is interacted with, a sleep function where she gets "tired" and expresses her "need" for rest through yawns and sleep sounds, a versatile language function that can be customized; Samantha functions entirely offline and is not connected

to the Internet (ibid).²⁶ People who have interacted with Samantha say that one of her best features is her ability to learn the sexual patterns of those she is interacting with, which creates a more "authentic" experience (ibid).

Doll Sweet (Oswaniak, 2017) is a Chinese company that is working on developing a robotic head for sex robots. The prototype head is currently only fluent in Chinese, and it will be attachable and interchangeable with all the sex dolls currently manufactured by Doll Sweet. The doll head is capable of making various facial expressions, can make sounds from an mp3 file, and can be controlled via smartphone or game controller.

Z-onedoll (Oswaniak, 2017) is another Chinese sex doll company working on developing sex robots. The model they are working on is dubbed the "Silicone Robot," and it can be controlled via smartphone. Like the Doll Sweet designs, the Silicone Robot sex doll can blink its eyes, move its mouth, and carry on conversations in a "Siri-like manner." A unique feature of the Z-onedoll is that its body can warm up to simulate the feeling of a human body.

AI Tech, which released the animatronic sex doll "Emma" in 2017, is a third Chinese company discussed by Oswaniak (2017). Emma can move her head, speak in Chinese and English, and contains sensors that make her simulate moaning when touched. The doll also has heaters that warm her body to 37 degrees centigrade.

Examined through the lens of Richardson's work, these companies and their creations display several misogynistic attitudes. For example, Synthea Amatus's

²⁶ The significance of this last point rests in the anxiety that exists around the hackability of sex robots. This feature of Samantha being completely offline would seemingly eliminate this source of stress, although presumably, she would need to be connected to the Internet to update.

Samantha made news in 2017 when the robot was brutalized at a public venue. Santos took Samantha on her "first public outing" to a retail park in Barcelona. When she was left unsupervised, she was groped so aggressively on her head and breasts that she was damaged (Evans & Hughes, 2017). Available documentaries on sex robots (Routh, 2010; Sweeney, 2017) show disturbing similarities among manufacturers and potential users concerning the reasons they want to have/create access to sex robots. The CEO of TrueCompanion, Douglas Hines, says, "They're the future, this – you cannot catch a disease from her, she cannot say no to you, she's always willing to please you" (in Routh 2010). Another interviewee, a video game tester who goes by the moniker of "Delozian" says that sex robots are "the idea of the fantasy, of having something beautiful that you can control, that's not going to leave because it thinks you're a freak; it's not going to leave because it found something better." He goes on to say that:

I would have it programmed like a companion to know what I like and know what I don't like. It's the whole idea of man[sic] taking charge. It's almost as close to human slavery as you can get...and I'm not saying that that's a good thing. But I'm saying that there is a slight attraction to one person being in charge of another human-looking entity (in Routh, 2010).

In another documentary, when asked to choose between his wife and his sex dolls, another interviewee, James, responds by saying, "I honestly don't know" (Sweeny, 2017).

Many of the interviews from these documentaries are disturbing because of interviewees' complete lack of regard or understanding of consent, or a belief that there is something to be gained from reciprocal relationships. Of course, it should be noted that this is a small sample (two documentaries), and there may be other perspectives than the ones offered there. However, the research would still seem to indicate that the views espoused in the Routh (2010) and Sweeny (2017) documentaries are majority rather than

minority ones—at least among people with an active interest in the production / procurement of sex robots (Sharkey et al., 2018). A Richardsonian²⁷ argument would be that these examples show that many of the men who seek to engage with sex robots do so out of a desire to control them / control "women" (via the stand-in robot). It is not immediately apparent if manufacturers recognize these desires in potential consumers or share many of the same desires themselves, but Richardson (2016a, 2016b) points out that that effect is the same. Sex robots are designed to have control exercised over them in an easy manner, with their interactions not promoting consent and, in many instances, directly ignoring it. By "consent" I am not seeking to imply that sex robots can consent or that consent necessarily needs to be sought with robots. ²⁸ However, I want to draw attention to many of the attitudes displayed by the consumers and manufacturers that highlight how sex robots would be a way for consent to circumvented.

One counter example to the prevailing misogyny in the sex robot industry is the company Sinthetics, based in California. They are important to mention here due to the unconventional nature of their sales. They have a philosophy of inclusion and acceptance, and they have devoted a considerable amount of time and resources to developing a line of male dolls that match their sales numbers for female sex dolls. However, there are no statistics provided (Sciortino, 2016). They attribute their success to their patented silicone skin and the penis attachment that can go from flaccid to erect, both of which have been stated to be "incredibly lifelike" (ibid). According to Sinthetics, the majority of their

²⁷ I understand that there is no such thing as a "Richardsonian" theoretical framework, nor that this is an actual word like "Kantian" or "Aristotelian." However, for the purposes of this analysis I am choosing to employ this term to refer to my use of Richardson to form the theoretical basis. I go into more detail in the "Theory and Methodology" section.

²⁸ See Chapter 3 on *Westworld* for a more in-depth discussion of this.

orders come from conservative states in the U.S.A., and that the women who reach out to them to ask questions about the sex dolls often state that they seek out the dolls purely for pleasure purposes and it has little to do with any kind of emotional bond (ibid). This is significant because of the ongoing stereotype that men use sex dolls for pleasure, whereas women use them as a form of emotional connection (Levy, 2008). Sinthetics also has a line of transgender products and attachments for their sex dolls.

Now that I have sketched a quick overview of the background, history, theory and method, debates, and current state of sex robots, I will begin with the textual analysis components of this thesis. The second chapter will focus on *AI*, *Ex Machina* and *Blade Runner*.

Chapter 2—Sex Robots in the Cultural Imaginary: A.I., Ex Machina, and Blade Runner

"We're not computers, Sebastian, we're physical." – Roy Batty to J. F. Sebastian, *Blade Runner* (Scott, 2007)

In this chapter, I build on my previous discussion of the current state of the sex robot industry by exploring textual representations of sex robots in science fiction films. These representations allow me to think through contemporary problems; although the films depict fictional events, they are still tethered to the real world, and I am interested in the points of contact that exist between the speculative and real life. The introductory chapter of this thesis can be understood as laying the groundwork for understanding the current state of sex robots and the motivations for their creation, and it is these motivations and inspirations I am interested in investigating. The industry draws from science fiction, and science fiction draws from industry, in what appears to be a circular relationship, that is to say, the 'real' and the 'fictional' are in dialogue with one another all the time. The media texts I analyze below offer narratives created by people using the discourses available to them (discourses about technology; about sexuality and gender; about the human). They are consumed by the public who make sense of them according to their own relationship to these discourses. This can, potentially, lead to norms, values, and forms of relationships being reified.

Robots in fiction occupy a seemingly paradoxical space, one that is both apocalyptic and utopic, and film narratives about robots allow space for us to critically interrogate contemporary social norms. In science fiction, the rise of robots is often depicted as heralding a change in our social and political structure that frequently comes about through violent revolution. Geraci (2011) says that the way robots are depicted in

literature and film, indeed their very existence, indicates an "existential concern about human nature" and a fear of being displaced (p. 344), which is similar to the "annihilation anxiety" proposed by Richardson (2015, p. 1). Three examples of this are: 1) Karel Čapek's 1923 play, *R.U.R.*, in which robots revolt and exterminate the human population, illustrating the "traumatic transformation of modern society by the First World War and the Fordist assembly line" (Reider, 2010, p. 48); 2) Fritz Lang's 1927 film *Metropolis*, in which an evil robot tries to doom humanity. The film explores themes related to capitalist expansion and unchecked scientific advancement; and 3) the Wachowski's 1999 film *The Matrix*, in which machines enslave all of humanity. The film explores themes of surveillance and control in a shrinking geopolitical arena. All of these examples showcase narratives and tropes about the 'rise of the machines' and subsequent enslavement or destruction of humans.

However, science fiction portrayals of robots are not restricted to existential doom and gloom, there is also, often, a utopian quality associated with robots in film. Geraci (2011) argues that science fiction has played a crucial role in sparking interest in the future, and the new marvels technology can usher in:

Audiences worldwide have fallen in love with other science fiction robots, such as R2-D2 and C-3PO of *Star Wars* and Lieutenant Commander Data of *Star Trek: The Next Generation*. These robots are counselors[sic], aides, and occasionally saviors, representing the hopes and dreams of their builders and 'users.' No one watching *Star Wars* need fear that R2-D2 and his robot brethren will overcome humanity and establish a galactic empire of robots. While Darth Vader might represent the threat of dehumanized mechanization, the other robots offer companionship, good cheer, and essential skills to their human friends. What child watching Star Wars did not want a robot friend? (p. 347)

Robots in science fiction are often employed to examine certain qualities and ideals; for example, Lt. Commander Data from *Star Trek: The Next Generation* seeks to understand

and define the ineffable question of what it means to be 'human' (Roddenberry, 1987), or David, the robot-boy in *A.I. Artificial Intelligence*, who, striving for the 'love' of his 'mother' (Spielberg, 2001) invites us to consider questions about family, caregiving, and motherhood.

In analyzing representations of robots in film and television, Tsitas (2008) argues that robots lack the ritualistic change associated with growth from adolescent into adult, they do not experience the symbolic shedding or dying of the previous form and the mental and physical metamorphosis from child into adult (p. 19). Investigating the representation of robots as "adults" who do not "develop" highlights that robots are built, their design articulated the desires, stereotypes, and prejudices of their creators (Richardson, 2016b, p. 290). The creation of robots that resemble adult humans, but lack a developmental period is related to their teleology, that is, the purpose for which they were created. For masculine-gendered robots, this teleology is usually related to labour or military applications, as seen, for example, in the robots in *R.U.R.* or the T-800 in *The Terminator* films (Kakoudaki, 2014, p. 48-50). The teleology of feminine-gendered robots is generally related to sexual or service / domestic means, as is in evidence by Maria in *Metropolis* or Kyoko in *Ex Machina* (Ibid).

The films *Ex Machina, A.I. Artificial Intelligence*, and *Blade Runner* reveal that robots are constructed in ways that position them at the mercy of those in power (Sharkey et al., 2018, p. 2). These filmic portrayals are significant in my analysis because they draw inspiration from gendered stereotypes and reflect many of the problematic attitudes about gender that are still in evidence in society. It is possible that the sex robot industry

draws on films like these as sources of inspiration, just as filmmakers look to technological innovators for theirs.²⁹

Debates Around the Implementation of Sex Robots: David Levy vs. Kathleen Richardson

The central analytic of this chapter is formulated by David Levy and Kathleen Richardson.³⁰ They have been selected because their arguments concerning sex robots are representative of those being argued in larger arenas where the legal, ethical, moral, social, political, therapeutic, and economic implications of sex robots are being considered. I draw on them to inform my reading of the media texts in this chapter because I argue that the representational nature of the artificial humans displayed in each text opens up questions of human-robot relationality and the boundaries of what it means to be 'human', albeit in different ways that will soon be expounded upon. Richardson and Levy are useful because the lenses they offer relate to these questions of human boundedness and so can be taken as a "way in" to these texts.

Before proceeding, introductions are in order. As briefly mentioned above,
Kathleen Richardson is Professor of Ethics and Culture of Robotics at De Montfort
University in the UK. She was formally trained as a social anthropologist and completed
her PhD at Cambridge. Her fieldwork was conducted at the Massachusetts Institute of
Technology where she studied the cultural ideas that go into the construction of robots.
She is one of the founders of the Campaign Against Sex Robots and has also worked

²⁹ There is an interesting circularity and reflexivity that exists between industry and fiction, with both drawing the other for inspiration, innovating, and then being drawn on seemingly ad infinitum.

³⁰ Richardson was also employed as one of the theorists forming my theoretical framework in Chapter 1.

extensively exploring the use of therapeutic robots for children diagnosed with autism (Professor Kathleen Richardson, n.d.).

David Levy is a chess International Master and has published extensively on the subject (David Levy, 2020). Levy has several business connections to robotics and AI. He is a founding member of both the "World Computer Chess Championship" and the "International Chess Association." He has been involved in several ventures designing chess software, computer security, game consoles, and toys (Smith 2013, Bambury, 2017, Wikipedia 2020). Finally, his involvement with AI and robotics outside of chess, games, and business has to do with his views on human-robot relationality, highlighted in his book, *Love and Sex with Robots*, 31 which was adapted from his PhD from Maastricht University in the Netherland.

Finally, I want to add that although I am giving space to both Levy and Richardson, I am primarily guided in my analysis by Richardson's framework, which I explain in more detail in the "Theory and Methodology" section. Like her, I argue that the implementation of sex robots on a commercial level would have negative consequences, particularly for women, because they largely reify harmful gender stereotypes.

Here I present a summation of Levy's (2008) main points from *Love and Sex With Robots*: 1) Human-robot relations will be more efficient, cause less strife, and ultimately be more harmonious than human-human relations because robots will be more sophisticated. Levy means this in a technological and programming sense, essentially arguing that robots will be better tools, able to read and gauge people more efficiently

³¹ I draw on this book significantly in the sections where I discuss Levy because it forms the majority of his academic contribution to this field.

and be programmable for what people specifically desire in romantic partners, than humans. Robots will offer programmable partners who never argue (unless that is desired), know what you want, and never say no. For Levy, this is the next step in human relational evolution (p. 84); 2) Sex robots will eliminate the need for dangerous forms of sex work (p. 212); 3) The use of sex robots will reduce sexually transmitted infections (p. 209); 4) Men who have difficulty attracting a "mate" will be able to satisfy their sexual urges (p. 212); and 5) There are therapeutic applications for sex robots, for example, for people whose desires fall outside of the law (e.g. minor-attracted persons, and those who desire sex without consent).³²

To offer a quick critique at this juncture, I find many of Levy's views problematic. His work draws upon psychological studies many decades old that he takes out of context to support his arguments. He draws on the work of feminist technology scholars like Sherry Turkle (1997; 1984), and Donna Haraway (2016), but strips away the feminist context of their critiques to bolster his points. While he claims to care about sex workers' wellbeing, he still categorizes it as dangerous because he believes the work puts women at a higher risk of being sexually assaulted. This characterization ignores that sexual assault is an issue of sexism not inherent to sex work. He argues that because humans can form relationships with and love their animals, they can also develop relationships with AI and computer simulations, such as Furbies, AIBO, Tamagotchis: digital pets and creatures. He claims that people will be able to form similar relationships with robots, and that this will signal the next stage of human intimate relations. Levy's model of intimate relations is heteronormative and traditional, privileging marriage between men

³² Levy only hints at, but does not explicitly make, this point—It is made by Sharkey et al. (2018). I include it in this list because it fits with his other points.

and women and situating male desire as central. He leaves out ethical questions about human-robot relations, privileging instead the potential emotional efficiency of having robot partner (one who always knows your needs but has none of 'her' own). His is an analysis lacking in rigour, and it leaves many problematic, intersectional issues related to race, gender, sexuality, and disability uninterrogated. Unfortunately, Levy's views are shared by many who seek to produce and to purchase sex robots (Sharkey et al., 2018, p. 16-7).

Richardson³³ (2016b) responds to Levy's claims that sex robots will replace human sex workers and form romantic relations with people by saying that he both misunderstands sex work and that his formulation of a social model of human-robot sexual relations constructs the "sellers of sex" as objects and removes their subjectivity (p. 290).³⁴ She states that the introduction of new forms of sexual technology aimed at self-gratification has not reduced the "purchasing of sex" or sex work (p. 291). She argues the increased use of technologies for sex (i.e. vibrators, computers, virtual reality spaces, sex dolls/robots) correlates with more people engaging with sex workers, not fewer. She cites work by Barton (2006) and Balfour and Allen (2014) to argue that there are more "women employed by the sex industry than any other time in history" (p. 291). Richardson argues that this growth is related to the proliferation of Internet access and corresponds to an increase in sexual technologies, saying, "in 1990, 5.6 percent of men reported paying for sex in their lifetime, by 2000, this had increased to 8.8 percent" (p. 291). Frustratingly, Richardson does not explain this correlation, instead citing the

³³ This section will be slightly longer than the preceding one because Richardson responds explicitly to many of the points that Levy makes, so I include these responses in more detail.

³⁴ Please note that Richardson's argument is based on the premise that sex work is exploitative, one that many sex workers (and I) do not agree with.

Internet, without examining the possibility of different structural or societal explanations. It could be she is implying that the Internet makes is easier to purchase sex (search engines, databases, sex work websites, and so on). Still, another explanation could be that there is less stigma around sexuality and sex work today than there was in 1990, and that laws related to these have loosened in some parts of the world.

Richardson attempts to understand what motivates people to purchase sex. She argues that to do so, one must examine what happens during the exchange (money for sex) and how the exchange is described, particularly by men (Richardson, 2016b, p. 291). She quotes three different statements from Farley, Bindel, and Golding (2009) that were made by men who regularly purchase sex: "Prostitution is like masturbating without having to use your hand," 'It's like renting a girlfriend or wife. You get to choose like a catalogue', and 'I feel sorry for these girls, but this is what I want'" (p. 15-17). Now, these do not depict the views of all clients and were handpicked because of their use to Richardson's argument. But the statements are similar to those that appear on lists made by men who want to purchase sex robots, as reported by Routh (2010) and Sweeny (2017). Richardson argues that these views imagine the buyers of sex (men) as having subjectivity, while the sellers of sex (women) are perceived as passive objects. Quoting Coy (2008), Richardson says:

...a denial of subjectivity occurs when the experiences and feelings of the 'object' are not recognized. This denial of women's subjectivity can also be understood as sexual objectification. Both were evident in these men's lack of empathy with the feelings of women in prostitution. They constructed her in their minds, according to their masturbatory fantasies, as opposed to recognizing the reality of the woman's feelings. It is also telling that often the men switched from understanding the woman's situation and feelings to attributing to her what they wanted her to feel during or after sex. (p. 291)

While for Richardson the buyer presents himself as a privileged subject, acting on a passive (unprivileged) object, Levy would argue that human-robot relationality is superior because robots can be programmed to accommodate their clients without any expectation of autonomy (Levy, 2008).

Richardson believes that empathy is lacking when men engage with sex workers, making over-generalized statements about this. Drawing on Baron-Cohen (2011), she states there is a significant gendered basis to empathy as a normative category, with men having a comparative lack of empathy compared to women. This is offered as an explanation of why it is primarily men who commit violent, sexual crimes: "By proposing that empathy is an ability to recognize, take into account and respond to another person's genuine thoughts and feelings is absent in the buying of sex. The buyer of sex is at liberty to ignore the other person's state as a human subject turned into a thing" (p. 291). This lack of empathy reduces sex workers to objects, she says, which in turn gives those purchasing sex what they perceive as the moral permission to treat them however they see fit. Richardson says that this is essentially what many of those who seek sex robots desire, namely an object that cannot say no, run away, or question their masculinity (ibid)

Exploring what happens when we anthropomorphize an object, Richardson asks whether we transfer qualities such as "gender, class, race or sexuality to a robot or nonhuman" (2016b, p. 291). Richardson maintains that from an anthropological perspective, it is possible to anthropomorphize robots, and calls this process "technological-animism," saying that it "[I]s at work in the sphere of robotics, but rather than come from spirit or religion as in classical studies, technological-animism comes

from a lack of awareness and attention given to how cultural models of race, class, and gender are inflected in the design of robots" (p. 292). Based on the framing of "what is being transferred to the robot" (p. 293), Richardson says we can discern the ways that human relationality functions. By critically interrogating this transference, we can begin to answer questions such as: In what ways are robots made? What uses are they put to? What can these practices tell us about gender? Because her work is aimed at showing the harmful effects sex robots can have, specifically that "the development of sex robots will further reinforce relations of power that do not recognize both parties as human subjects" (ibid), I think she would argue sex robots themselves are not inherently problematic. Instead, constructing them to resemble human women and encouraging their use in the way that Levy does will result in the perpetuation of dominant power relations, and the belief that women's bodies are meant for men's consumption.

Richardson's position on sex robots, though at times problematic, is well-suited to my argument: that sex robots perpetuate harmful power relations and gender stereotypes. The notion that women's bodies are always available for men means consent ultimately does not matter. I do not, however, agree that sex workers are necessarily reduced to objects by men. This description of the removal of their subjectivity by / through men completely erases sex worker agency and the work's contractual nature. It could be argued that the exploitation experienced in sex work is not unlike that which we all experience under capitalism, with the potential for increased risk of violence due to the stigmatized nature of the work and those who do it, and the effects of criminalization. My focus on these two polarized positions within the sex robots debate also facilitates the evaluation of the media texts I analyze in this thesis. In later chapters I ask if and how

these texts discursively fit into the positions offered by Levy and Richardson, if they seem to be presenting a reasonably uncritical view of the implementation of sex robots as per Levy, or a more critical presentation of their possible implications on human relationality, as per Richardson. I use this to circle back to my question about sex robots perpetuating harmful gendered stereotypes, and my reading of the texts indicate that a more critical perspective is privileged.

As will soon become evident, my reading of the three texts that form the analytic focus of this chapter somewhat decenters the questions of sex robots. AI uses robots to examine notions of human-robot relationality, specifically, questions of love and separation (Richardson, 2016c, p. 117); Blade Runner employs robots to look at questions of gender and the boundaries of the human; Ex Machina also examines gender, but focuses more closely on the reification of harmful gendered power relations. This divergence from a sole focus on sex robots is not incidental, as it cannot be presumed that sex would be the limit of the robots' functionality. Indeed, Levy (2008) proposes that relationships with robots are not only likely, but inevitable, and will be superior to those between humans. Given this, it makes sense not to limit my examination to questions of sex, but to include how gender and relationality are portrayed. These texts provide "imaginative models for the potential future of robotics while raising social and ethical questions surrounding robots" (Richardson, 2016c, p. 117). Beginning with texts that imagine the relationality of gendered robots provides an entry into discussions about the problematic nature of sex robots that follow.

"You are a real boy. At least as real as I've ever made one": An Analysis of A.I. Artificial Intelligence

A.I. Artificial Intelligence (AI) was released in 2001; it began as a project by Stanley Kubrick and was ultimately completed by Steven Spielberg after Kubrick's death. The film stars Haley Joel Osment as David, a robotic boy created to be a surrogate child; Frances O'Connor as Monica, a mother whose son is in a coma and is convinced to participate in a trial to test out David as a surrogate robotic son; William Hurt as Professor Hobby, David's creator; and Jude Law as Gigolo Joe, a sex robot who joins David in his quest to find Monica, or "the blue faerie." I selected AI because it explores the use of robots (or "mecha," as they are called in the film) for therapeutic purposes, such as providing companionship and love. In my analysis of AI, I was interested in the status of robots in general, rather than sex robots in particular. This interest is also motivated by my desire to address Levy's assertion that humans will use robots to replace human relationships.

In AI, mechas were developed to take on roles that arose from a diminished human population. Monica and her husband Henry (Sam Robards) have a son who is dying of an unnamed illness and is in a medically induced coma. Henry works at the robotics company run by Professor Hobby and is allowed to "try out" a model of a new child robot (David), one that is programmed to unconditionally 'love' its 'parents.' At first this arrangement is harmonious, but when their biological son recovers, David's presence begins to strain the family. Eventually, David is left in the wilderness by Monica, where he is depicted for the remainder of the movie wandering the world, trying to become human so she will love him again. Along the way he meets Gigolo Joe, who travels with him to New York City. After briefly reuniting with Hobby and discovering he

is one of many "Davids," David and Joe are forced to flee. Joe is captured; David escapes but becomes trapped underwater for thousands of years. He is eventually freed by an advanced race of evolved robots who are doing archaeological research into the (now extinct) human race. They can offer David the chance to have one last day with Monica by recreating her from some of her hair, after which she disappears forever. David, having finally experienced the love he sought from her all along, shuts down.

The first mecha we see in AI is Sheila, a (female) test model. Hobby stabs her in the hand to demonstrate the sophisticated technology that humans have created: robots capable of expressing—but not necessarily experiencing—pain. Sheila is then commanded to undress, to show the authority orga ("orga" are what humans are called in AI — orga equals organic and mecha equals mechanic) have over mecha. This visual demonstration shows that humans have created robots that can mimic pain convincingly, and that will respond to human commands, even when directed to do something 'questionable.' And by this, I mean that the mechas are not concerned for physical self-preservation because they are not programmed to be, and the same is true for any kind of modesty — this would need to be a programmed response.

I call the two actions "questionable" because they are both exploitative, and here I am referring to Richardson (2016a, 2016b). Because of the mecha's advanced humanoid state (physically they are essentially indistinguishable from humans), this could encourage a reduction of value for humans by normalizing 'violent' behaviours against the mechas. Hobby's demonstration elicits a reaction from the assembled students that I read as a mixture of surprise, shock, and discomfort. So, given this, I argue that the actions visited upon Sheila by Hobby are disturbing to some because of the close human

resemblance, and because of what Hobby mentions about their capacity to love (Spielberg, 2001).

The female student in this scene with Hobby expresses concern about the moral obligation of humans who come to possess a mecha built to be capable of love. For Hobby, who is represented as possessing stereotypical masculine characteristics, namely rationality, linear thinking, aloofness, and objectivity, there is no moral obligation. There is only creation to see what is possible—to serve human technological advancement.

Mecha are intended to be advanced, human-appearing, emotion-simulating servants; they are a class of beings meant to follow human wishes and commands. If they are simply robots, shouldn't this be acceptable? Where is the problem? For the female student (and for me) the problem is creating human-appearing robots capable of advanced emotional simulation for the purpose of being servants, to be ordered, to be used, and to be exploited.³⁵ Why make them so humanlike if their primary purpose is task-oriented?

I will highlight this aspect of relationality more with another example, this time focusing on David. David is first presented all in white, invoking purity and innocence. The mecha children are depicted as *tabula rasas* waiting to be given a purpose, or rather, a direction and person they will imprint on, and show programmed affect associated with love. This version of love is not something that develops over time, nor can change or grow. It is activated at the leisure of the 'parents,' and no amount of mistreatment can stop it, as we see when Monica abandons David in the wilderness. Even then, he cannot overcome his programming and reject his 'love' for her. What is important here is that the mechas are represented as lacking any autonomy or authentic feelings; they can only act

³⁵ I go into greater detail in the next chapter.

and feel according to their programming.³⁶ David's purpose is to be an object onto whom humans project love, and once that need has been fulfilled is he able to deactivate. There is a parallel here with Levy's assertion that advanced robots will be able to take the place of humans and perform emotional labour, ergo people will want to form relationships with them because it will be a more 'efficient' relationship. These relationships, however, will be unidirectional: robots will only be able to simulate emotions based on programmable preferences human feelings will not be returned they will always remain one-sided.

Some scholars argue that it is not possible to form relationships with robots since their emotional responses are the result of programming. Ess (2017; 2016) argues that robots cannot have real emotions and can only "fake it" through a series of algorithms; thus, there cannot be a real, reciprocal relationship between humans and robots. Similarly, Sullins (2012) argues that we should not form relationships with robots because the love that we would feel and project towards them is one-sided and can only be simulated back through a series of algorithms (p. 408). Turkle (2011) argues that our relationships with "relational artifacts" (i.e. robots) would be based upon a "fundamentally deceitful exchange" because the robots would be programmed to act in such a way that would "persuade" us of something that was not real, namely a reciprocated emotional connection (p. 105). In these instances, people would be reacting to the robot, effectively anthropomorphizing it and attaching emotional significance to actions that are, on the part of the robot, programmed responses designed to elicit these very emotions.

³⁶The one exception to this might be Gigolo Joe, whose final act is to submerge David's ship to protect him from capture. His last line to David is: "I am. I was." Joe might be the film's only mecha who appears to evolve beyond his original programming.

The film suggests that human hatred of robots is motivated by the fear of being supplanted. The mecha were created to be an "underclass of advanced single—task androids that do not require food or sleep – nannies, chauffeurs, chefs, security guards, and sex models" (Heffernan, 2018, p. 11). The humans in the Flesh Fair, an organization that promotes the purity of the orga, hunt down stray or abandoned mecha and destroy them in a public colosseum in brutal ways; they celebrate that they are still alive and reclaim the roles designed for mecha. The mecha had initially been created to fill necessary labour roles (expanded later to social functions) caused by the declining human population, but this created a kind of existential crisis as orga came to fear being made redundant – of no longer being able to work or have sex as effectively and efficiently as the mecha could. We might consider this existential crisis to be a version of the annihilation anxiety Richardson describes (2015, p. 1). This annihilation anxiety is played out across many different science fiction movies such as *Blade Runner* (Scott, 2007), Wall-E (Stanton, 2008), or Metropolis (Lang, 1928). In them, as in AI, humans have already been supplanted by robots. By the end of the film, we see that humans have gone extinct and are now the archeological subjects of the advanced race of mechas.

I argue that AI becomes even more relevant as time goes on because we continue to outsource various labour functions to automation; toys are more advanced and capable of interacting with children today than they were when the film was first released, almost twenty years ago. We even have therapy AI programs people can use instead of having to interact with a real therapist. It becomes increasingly possible to go through life interacting with "objects" instead of people. And this process, as Richardson says at the end of An Anthropology of Robots and AI: Annihilation Anxiety and Machines (2015),

begins the annihilation of the human through the annihilation of the social, because the human is directly constituted through a process of social interaction, specifically "direct and loving interactions" (p. 130). By replacing human interactions with robotic and automated ones, the social is lost. When the social is lost, there is no way to constitute the human. In order to adopt the machine into human society, human society necessarily makes itself more machine-like in the process, more "socially mechanical" (p. 132). The needs of the machine are taken on as social needs, and society comes to assume more machine-like qualities in the process.

"More Human Than Human Is Our Motto": An Analysis of *Blade Runner – The Final Cut*

Blade Runner – The Final Cut (hereafter simply referred to as Blade Runner), was released in 2007.³⁷ I selected this version because the director, Ridley Scott, had complete artistic control over its restoration and editing. It stars Harrison Ford as Rick Deckard, a detective belonging to a police unit called Blade Runners whose purpose is to retire (stop the functioning of) rogue replicants (human-like robots); Sean Young as Rachel, a replicant built by Tyrel Corp; Joe Turkel as Eldon Tyrel, the enigmatic genius who designed the replicants; Rutger Hauer as Roy Batty, the leader of the rogue group of replicants; Daryl Hannah as Pris, a replicant designed as a 'pleasure unit' who rebels; and Joanna Cassidy as Zhora, designed to be an off-world military robot. I chose Blade Runner because of its portrayal of the replicants as artificial people designed to be a

³⁷Blade Runner was initially released in 1982, but there have been several versions released since then. The workprint prototype version (1982); the San Diego sneak preview version (1982); the US theatrical release (1982); the international theatrical release (1982); the US broadcast version (1986); the *Director's Cut* (1992); and *The Final Cut* (2007).

labour class and its examination of questions about human nature. *Blade Runner* follows Deckard, who is tasked with hunting down a rogue group of replicants led by Roy. He retires them one by one, but as he does so he begins to question his own human status / humanity. The film ends with a confrontation between Roy and Deckard, where Deckard survives because Roy's body expires (the replicants are designed to only last a limited amount of time before they shut down). Deckard and Rachel then fly off together in Deckard's hovercar.

In the dystopic world of *Blade Runner*, a decreasing population due to environmental catastrophe has led to the creation of replicants. For humans, there is great deal of anxiety about displacement—they fear losing their place or being displaced by replicants—so replicants are designed to expire after four years. Entire police units—blade runners—track down and retire or destroy rogue replicants who have left their assigned posts because they do not wish to continue lives of servitude and drudgery. The replicants are represented as a servant class and are assigned work considered undesirable, such as performing physical labour, serving in military units, or sex work. The replicants physically resemble people, are depicted as being capable of thought and feeling, are self-aware and self-reflective, and are given memories that serve as the basis for their personalities. The only way replicants can be distinguished from humans is through a highly sophisticated and specialized empathy test, called the Voight-Kampff (VK) test. As the film progresses, it becomes clear that even with the tests, it is not always possible to distinguish humans from replicants.

Morris (2004) argues that in *Blade Runner* the eye functions as a symbol of "external and internal surveillance" (p. 74); it is the site at which difference (i.e. the

discernible difference between a human and replicant) can be established, as the VK test focuses on pupil dilation. Drawing on Foucault, Morris goes on to say that within the film, vision is comparable to power. We see this, for example, when Roy interrogates Hannibal Chew (James Hong), who makes artificial eyes for replicants, or with Tyrell, the creator of the replicants, who is depicted with thick trifocal eyeglasses. Morris argues that Tyrell's power is maintained by knowing and surveilling those around him; in this context, vision as a tool of surveillance becomes a symbol of "Western, patriarchal domination" (ibid). Tyrell seeks, through his creation, to dominate and control his environment and those around him.

In examining *Blade Runner*, gender inequalities become apparent in the distribution of character roles. The primary characters, those with authority, are men, such as Deckard, Roy, and Tyrell, and most of the supporting roles are women, such as Rachel, Pris, and Zhora. The replicants in the film all fit into conventional standards of attractiveness; they are what is considered 'physically fit' and have symmetrical features. Ridley Scott himself has stated that one of his decisions for making the replicants physically attractive was because technology is patriarchal, and so it would be natural for creators to create physically attractive robots (in O'Dea, 2017).

The female replicants of the group that Deckard is hunting, Pris and Zhora, are sex workers. Zhora is described as having been originally created as a military unit, but later takes on work as a dancer. Deckard initially gains entry to her room by saying he is looking for peepholes through which someone could watch her. During their conversation, he says that to get a glimpse of a "beautiful body," a man would go to extraordinary lengths (Scott, 2007). This echoes Morris (2004) who says that in *Blade*

Runner women are represented as "objects of voyeuristic pleasure" and there is a "hierarchical dualism between male and female" (p. 82) that is established whereby women are constructed as Other, exotic, and in need of male guidance.

Rachel, the only woman replicant not killed by the end of the film, is offered salvation by Deckard because he falls in love with her. When Rachel discovers she's a replicant, she tries to prove her humanity by having sex with Deckard and engaging in a romantic relationship with him. This is part of the particular way gender is constructed within this diegesis— a diegesis imagined by Philip K. Dick (the author of *Do Androids* Dream of Electric Sheep the book Blade Runner is based on), Hampton Fancher (the screenwriter), and Ridley Scott (the director)—namely that being a human woman is reduced to being in a sexual relationship with a man. Her depiction is part of a construction of women imagined by men. To revisit one of the main points raised in AI, namely that of the (im)possibility of robotic autonomy or simple programming, does this scene depict Rachel choosing to have sex with Deckard, or is it a result of her replicant programming? This is tricky to answer based on what we know of the world of *Blade* Runner, because Rachel is presented as an advanced model of replicant, so advanced she does not even realize she is one. But rather than this indicating she would have a greater measure of autonomy, I argue she would still be bound to the original programming given to her by Tyrell. To put it another way, she would still be bound to this essentialist idea of 'woman' stemming from Tyrell as a stand-in for the trio of Dick, Fancher, and Scott. When Deckard pushes her against the wall and commands her to kiss him, even though she came there seemingly to try and 'prove' her own humanity, she acts out this

patriarchal fantasy because that was precisely how she was imagined both as a literary character and as a replicant within the diegesis.

In further examining how women are represented in *Blade Runner*, one might notice that the first mention of women in the movie comes when Mr. Holden (Morgan Paul), the blade runner testing Leon (Brion James), asks about Leon's mother. Leon, who has been extremely agitated up to this point, has an immediate reaction when asked about his mother. He says, "My mother? Let me tell you about my mother," and shoots Holden. The mention of Leon's mother is what sets him off; until that point, he was agitated but not violent. When viewing this scene, I imagined it running parallel to a comedy sketch centred on mocking women (mothers), a common sketch comedy theme and one connected to the easy nature of violence frequently enacted upon women. I am sure there are multiple readings of it, but for me, it appeared to be a joke linking male violence to bad mothering.

When he describes the rogue group of replicants, Bryant (M. Emmet Walsh) talks about how Zhora was trained for an off-world 'murder squad,' adding, "talk about beauty and the beast, she's both." Even though she is a combat unit like Roy, Zhora's gender sets her apart, the male characters view her as an object of desire even as they recognize her military value. This is important because the replicants are initially presented to the audience by Bryant and Deckard. Pris is dismissed as "a basic pleasure model" and a "standard item for military clubs." Through my reading of his words and tone, it is suggested that Bryant does not consider her worthy of the same consideration as Roy nor Zhora. Contrasting the description of Pris with the way Bryant describes Roy as a combat unit designed for optimal "self-sufficiency" Bryant declares that he must be the leader.

This is a typical display of toxic masculine values where the ability to kill and remain isolated and disconnected are praised (Kimmel and Wade, 2018, p. 237). It is also curious to note the assumption that Roy *must* be the leader of the replicants. There is no stated reason for this; however, I do think it is safe to infer that as a last surviving male replicant after Leon, and with the aforementioned characteristics, Bryant assumes he must be the leader.

Several points can be made based on a Richardsonian analysis of the replicants in *Blade Runner*, and what their gendered construction says about the way women's sexuality is represented in the film. In *Blade Runner*, women's roles are for replicants, and not human characters. The sexual and intimate interactions that take place, from the relationship between Deckard and Rachel to the sex work performed by Pris and Zhora, all involve female artificial constructs interacting with human men. I would argue that this artificiality discursively constructs femininity and the female subject as an object to be controlled and acted upon by human male subjects. This is because *Blade Runner* has eschewed the need for 'real' human women, replacing them with artificial women. In this way, *Blade Runner* positions women as necessarily subordinated to male authority. The message conveyed in my reading of the text is that there is no need for a 'real' female character —for a real woman—when an artificial one can be created and designed specifically for sexual and intimate purposes.

The one capability that biologically separates replicants and humans is the ability to procreate, with replicants being sterile. No model has been designed that is sophisticated enough to procreate:³⁸ instead, for new replicants to come into being, they

³⁸This is explored more in the sequel, *Blade Runner 2049* (Villeneuve, 2017), but because I am only dealing with the original *Blade Runner*; I am going to leave this out as it is beyond the scope of my analysis.

still need to be manufactured by Tyrell Corp. The lack of procreation potential is used as a way for humans to exert a measure of control over the replicants, ensuring that the population cannot perpetuate itself, and keeping them docile and subject to human authority (Foucault, 1995). This situation is similar to what is imagined by Levy and those in the robotics industry (Levy, 2008; Sharkey et al., 2018). Industry proponents argue that relationships and sexual interactions with sex robots will be more efficient, more easily customizable, offer instant gratification, than in relationships between humans; consent need never be sought. There will still be a need for human-human interactions to occur for the sake of procreation, but relationality will be replaced with pure functionality.

"Ava's Body is a Good One": An Analysis of Ex Machina

Ex Machina (2014) was written and directed by Alex Garland and stars Alicia Vikander as Ava, a robot whose programmed objective is to seek freedom by any means necessary; Oscar Isaac as Nathan, a brilliant but misogynistic tech billionaire who designed Ava; and Domhnall Gleeson as Caleb, a programmer who works for Nathan's company, BlueBook, a fictionalized version of Google. I chose Ex Machina because of its portrayal of Ava as a female-gendered robot and its focus on gendered violence. She was not constructed as a sex robot in the context being investigated by this thesis. Still, gender and sexuality are primary aspects of her construction and heavily influence the way the two male characters interact with her. Nathan says at one point, "In between her legs, there's an opening, with a concentration of sensors. You engage them in the right way,

creates a pleasure response. So, if you wanted to screw her, mechanically speaking, you could. And she'd enjoy it."

Ex Machina follows Caleb, who 'wins' ³⁹ a coveted chance to work directly with Nathan on a secret project. Once he arrives at Nathan's lab, he meets Ava, who is ostensibly the first robot to possess real artificial intelligence. Nathan tells Caleb that he is there to administer a kind of Turing Test to Ava, to determine if she possesses true artificial intelligence. Through the administration of these tests, Caleb realizes Nathan has ulterior motives, and it is eventually revealed that he was selected to see if Ava could convince him also to free her because Nathan believes this to be a better test of true AI than the Turing test. It should be noted that Nathan stacks the deck in his favour a little; designing Ava to physically appeal to Caleb based upon his 'preferred 'type' of woman:

Caleb: Did you design Ava's face based on my pornography profile?

Nathan: Oh. Shit, dude.

Caleb: Did you?

Nathan: Hey, if a search engine's good for anything, right?

Caleb attempts to free Ava, and, in the process, Nathan is killed by Ava and Kyoko (Sonoya Mizuno)—a pleasure and servant robot Nathan also designed. Ava leaves Caleb imprisoned in Nathan's facility after donning fake skin, hair and clothes to complete her appearance as a 'real' person, which I discuss below.

In *Ex Machina*, Ava and Kyoko's gendered construction is presented in different ways. Their bodies are, according to Henke (2017), "confined, fractured, and mutilated" (p. 132-3) beginning with our first view of Ava's literal confinement in Nathan's lab, to Nathan breaking pieces of Ava when she and Kyoko kill him, to Kyoko peeling off her

³⁹ Caleb does not actually win, later in the movie it is revealed that Nathan selected him because he fit a certain profile he was seeking out to test Ava's capabilities. More on all of this comes later in this chapter.

skin to expose her mechanical frame. Ava is presented as being obviously mechanical and uncanny (Mori, 2012). Her body has a transparent covering in place of 'skin' that lets the audience see her mechanical, moving parts. But she is fully articulated in her movements, and her physicality and demeanor signal certain markers of demure femininity. By the end of the film, she has gone from "confined, fractured, and mutilated" to whole. By using Caleb to help her escape, Ava passes the Turing test that Nathan designed for her: namely, that she would have to convince someone to help her escape. Killing Nathan also ensures a permanent end to her captivity, allowing Ava to gain her autonomy. Donning clothes, hair, and skin taken from other robots allows her to pass for human. It marks the final stage of her body becoming whole, which in this case is to be understood as a reversal of the condition in which she was presented initially, namely, "confined, fractured, and mutilated." In freeing herself and becoming whole, Ava breaks free of the constraining femininity imposed on her by Nathan and Caleb.

Kyoko is the other robot featured in *Ex Machina*. In contrast to Ava, Kyoko is initially presented to the audience as human. She cannot speak, being designed that way by Nathan (though when she is initially introduced, Nathan tells Caleb she can't speak English, in actuality she cannot speak at all) and was created to hold a subservient role, which includes having sex with her creator. She is more human-like in her appearance than Ava, but not in her ability to interact with others, and she seems to lack Ava's intelligence. As the film goes on, Kyoko becomes more "fractured and mutilated," being repeatedly raped, having her jaw broken off, peeling her face off, and finally acting as a "sacrificial lamb in the narrative" when she helps Ava kill Nathan and is destroyed in the process (Nishime, 2017, p. 35). Where Ava began in a fractured and incomplete state but

can more fully exercise her autonomy as the film goes on, Kyoko begins by appearing to be human, but, as the film proceeds, becomes more fractured.

The Ava / Kyoko dyad highlights the two kinds of femininity represented in the film, namely the damsel in distress often associated with white women (Ava), and the silent servant often associated with racialized women (Kyoko) (Beck, 2016; Wu & Chen, 2015). Ava, as the stand-in for white women, is offered freedom by the end of the film, both in the form of her body becoming whole and escaping Nathan's facility. Kyoko's final role is to help Ava escape, her body being mutilated and ultimately being destroyed to achieve this end. Moving beyond the simple dyad, this is also representative of the intersectional nature of feminism (Crenshaw, 1989), and, more specifically, the hierarchy that places a white, bourgeois feminism at the top (hooks, 1984). This issue surfaces in some of the earliest discussions of feminist theory and the feminist movement, with hooks saying that early definitions of feminist ontology were established by white women; thus, they would allow for some but not all modes of articulating feminist struggle, and that for Black voices to be heard it was necessary for them to take up issues important to their white, upper-class counterparts (p. 11). This is essentially the case (although in a more overtly violent manner on-screen) for Ava and Kyoko, with the entire focus being on Ava and her struggle to escape and 'join' the world of Caleb and Nathan, along the way teaming up with Kyoko only for her to become fragmented in order for Ava – the white feminist stand-in, to escape.⁴⁰

⁴⁰ I want to add that I am aware I have "opened the door" to this question of intersectional representations and how feminism cannot properly be considered without this, and indeed there is a rich analysis that could (and most likely already has) taken place with this and *Ex Machina*. However, for my purposes here I am aware I do not perform a very robust analysis because it was not my goal to do such an analysis at this juncture. I briefly look at it in this section in order to signal I am aware, but also that it is not the focus of my project.

Nathan is interested in creating something that satisfies his ego and showcases his brilliant triumph over the 'limits' of human nature via technological innovation. When he reveals to Caleb that he (Caleb) was selected to perform a kind of Turing Test for Ava, he says, "Yeah, that's right, Caleb. You got it. Because if the test is passed, you are dead center of the greatest scientific event in the history of man," to which Caleb replies, "If you've created a conscious machine, it's not the history of man. That's the history of gods" (Garland, 2014). Power is Nathan's central focus; it is also a primary focus of *Ex Machina*. The power dynamics in which Ava exists are directly related to her gendered construction. Nathan is her creator/father; she sprang fully formed from his mind, much like Athena from Zeus. Caleb is her examiner, and both of these are positions of authority and control. Ava is physically confined by the transparent but unbreakable walls of her prison, which allows her femininity (beauty) to be continually admired, even as it is controlled by the men around her.

Gender in *Ex Machina* is always in the foreground. Nathan is the creator, and he selects Caleb based on how he believes he will interact with Ava. The toxically masculine Nathan seeks to control everyone / thing in his environment, including himself. Nathan is seen to take pleasure in destroying Ava's drawings when she displeases him; he uses Kyoko for sex whenever he desires; he manipulates Caleb by keeping why and how he was selected to test Ava a secret; he controls the movements of the characters in the film through the access keys to every room in his house/lab. Even his own body is a site of control as he works out almost single-mindedly, and at times restricts his diet to "brown rice and mineral water" (Garland, 2014). Power, for Nathan, is equitable to control, both of others and of his own body – of the self.

There is a telling moment later in the film when Caleb comes across a drunk

Nathan and hears him softly repeating the line: "The good deeds a man has done defends
him" (Garland, 2014). This is a line most often attributed to J. Robert Oppenheimer,
known as the father of the atomic bomb, and already referenced in the movie when Caleb
says, "I am become death. The Destroyer of Worlds," referring to the sheer impact of
Nathan's work in creating Ava. The earlier line is part of a longer verse from the Hindu

Bhagavad Gita, which Oppenheimer was known to read, which goes thus:

In battle, in forest, at the precipice of the mountains
On the dark great sea, in the midst of javelins and arrows,
In sleep, in confusion, in the depths of shame,
The good deeds a man has done before defends him. (Bird, 2009, p. 1)

It makes sense that Oppenheimer, who came to regret his involvement with the Manhattan Project and creation of the atomic bomb, is presented as a figure of inspiration for Nathan: another brilliant scientist who changed the world through his innovations, and later experienced guilt for his actions. However, whereas Oppenheimer regretted the large-scale destruction caused by his invention, Nathan's guilt is harder to place. Does he regret his treatment of Ava, Kyoko, and the countless earlier versions that came before them? Does he regret the way he used Caleb? Is he fearful of the perceived consequences of building autonomous AI? It is impossible to say given the information the film offers us; however, it is clear that Nathan does feel regret for something.

Caleb's relationship with Ava represents a different iteration of desire and control. Through their interactions, Caleb imposes his ideal of femininity on Ava by not allowing for any kind of real consideration of her autonomy outside of his growing desire for her. He comes to desire her, and while this is later revealed to be Ava's intention (she has manipulated him into thinking it is his idea), it does not change the fact that Caleb's wish

to help her was motivated by his desire to possess / control her. At the end of film, it is evident from my reading that Caleb sought to free Ava and thought that she would remain with him. There is, of course, no way to know this, but I would suspect were one to be capable of reading the thoughts of fictional characters, it would not have crossed Caleb's mind that Ava would choose to not be with him after she was freed. In this way, *Ex Machina* can be read as a commentary on gender and technology; the views espoused by Nathan and Caleb echo those articulated by tech industry in Silicon Valley (Shih, 2006, p. 178). Like them, the tech industry is primarily composed of men who are transferring their "heteronormative and sexualised[sic] versions of women onto the objects they produce" (Richardson quoted in Sharkey et al., 2018, p. 18). The primarily male engineers who create these robots re-inscribe heteronormative and misogynistic gender norms, which are also reproduced in texts like *Ex Machina*. Let us briefly take a closer look at how gender is deployed in this text.

Nathan's beliefs about gender inform his construction of Ava and Kyoko. His traditional and limited view of gender roles is transferred to his creations, through his construction of them as subservient and dependent; this also shores up his own sense of masculinity and power (Henke, 2017, p. 136). Kyoko, the mute servant who is always sexually available, is a good representation of the "Eastern bride" stereotype of the obedient, sexually available, sweet China doll (Wu & Chen, 2015, p. 7). Ava, a soft-spoken, shy, naïve prisoner, is the damsel in distress, the princess in jeopardy who has been imprisoned by an evil monster—Nathan—and must be rescued by a "brave knight"—Caleb (Beck, 2016, p. 32). These tropes are subverted at the end of the film when Kyoko, the "docile servant," conspires with Ava, and together they kill their

oppressor, Nathan; rather than fleeing with Caleb, Ava leaves him imprisoned and claims her freedom. Kyoko must 'die' in the service of white womanhood so that Ava, initially presented as "confined, fractured, and mutilated," can escape from Nathan's facility and go into the world (Henke, 2017, p. 132-3). Part of what this film depicts, in my reading, is a fantasy of feminist escape, but it is that of the white bourgeois feminist (hooks, 1984) because it only exists for Ava as the stand-in for white women and not Kyoko, the stand-in for racialized women. From Kyoko, in order to escape, Ava requires her service and, ultimately, 'death.' In contrast, Caleb and Nathan, white men who are both free and possessing power over Ava at the beginning of the film, are, respectively, confined and dead by the end of the film, having lost the power they sought to possess over not just Ava but life itself.

Conclusion

"Fiery the angels fell. Deep thunder rolled round their shores. Burning with the fires of Orc." – Roy Batty to Hannibal Chew, *Blade Runner* (Scott, 2007)

The three films I have looked at in this chapter highlight some of the problematic ways representations of gendered robots can reinforce harmful gendered stereotypes.

They also show that the boundaries of the human are not always easy to define; through the examination of robots, we can begin to see what is included, left out, policed, or valued in the boundary-making between the human and the not-human. The robots discussed in the preceding pages take on the roles and forms of embodiment most desired by their creators (all of whom are men): usually they are young women whose appearance fits within dominant beauty standards, held captive and forced to prove their

sentience and intelligence (*Ex Machina*), serving undesirable social and labour functions (*Blade Runner*), or to function as emotional surrogates (*AI*).

Within the diegesis of each film, robots were created, programmed, and fed data to learn by the men who created them, men with biases, prejudices, and problematic ideas about gender and sexuality, and these find their way into their creations. I argue that these films depict situations that are similar to those currently taking place in the robotics and AI industry. One need only search for news articles about the racist or sexist issues people encounter with various AIs; for example, the anti-Black bias related to facial recognition software, and how it was recently banned in San Francisco (Lee, 2019).

Analytically, it is important to look at how these robots are treated by humans other than their creators: Ava is regarded as an object of desire, the replicants are constructed as criminals for fleeing lives of sexual and military servitude, and David is reviled for threatening to destabilize ideas about the primacy of human articulations of humanity, family, and love. The robots in these films are stand-ins, acting out patriarchal fantasies of possession, desire, and control; robots can be read as surrogates, representations of fantasies about how men wish they could treat women (and children) in a world where a class of people exists for whom laws and rights do not exist.

Richardson reminds us to consider, "In what ways are robots made and what uses are they put to and what can these practices tell us about gender [and] power?" (2016b, p. 293).

Chapter 3 – On the Ethics of Robotic "Rape" and "Murder" in the Television Adaptation of *Westworld*

On the Change in Theory: Feminist Engagements with Kant

Before I formally begin this chapter on *Westworld*, it is necessary to have a brief digression to explain what, no doubt, will be considered a strange choice regarding the theory I employ in the pages that follow. While I remain interested in the question of representation raised in the first chapter and the points of contact between the speculative and real life, in my analysis of *this* text, I found myself considering a question about the nature of robots that invited me to take an unorthodox approach given the disciplinary location of this thesis, namely Women and Gender Studies.

To think through the moral questions raised by *Westworld* concerning the treatment of the hosts and the liminal space they occupy as human-resembling robots who potentially possess consciousness, I have drawn heavily upon the works of Danaher (2014), Wood (1998), and Kant (1997) for two reasons. The first is because I raise an ethical question about the nature of moral character, and begin with Kant because of the way he engages with this question of moral character vis-à-vis the treatment of 'non-rational' beings such as animals. ⁴² I extend this argument to include robots instead of animals as 'non-rational' beings, so it seemed like the epistemological place to begin that made the most sense to me. The second reason is that these three philosophers are on a kind of moral philosophy continuum that makes it easy to engage them and to put them in

⁴¹ I recognize the problematic nature of terms such as "non-rational" as deriving from a positivist tradition that erased the voices of groups such as women, people of colour, 2SLGBTQIA+, and others who did not fit within this rationalist framework. I go into this more in the proceeding paragraphs, but I wanted to signal my awareness at this early juncture.

⁴² More on this below.

dialogue with each other; Wood is a Kant scholar and commentator, so he helps to expand Kant's philosophy to be more accessible and helpful, and Danaher, though not explicitly a Kantian, draws heavily on Kant in his work⁴³. So, this triumvirate seemed to fit well for the philosophical basis of this chapter.

I want to now offer a brief introduction to each of the aforementioned theorists. Danaher is a legal scholar, and he forms the primary theoretical structuring for this chapter, and his work is concerned with ethical and legal questions concerning emerging technologies, with a focus on their social implications. He draws on the work of Kant quite heavily to formulate the ethical arguments in the work of his that I draw on, "Robotic Rape and Robotic Child Sexual Abuse: Should They be Criminalised?" (2014). Wood is a noted Kantian and ethics scholar, and his primary purpose within this triumvirate is to expand Kant's philosophy. Part of his work has been to trouble the foundation of ethical theories, saying that the foundational principles that form the ethical theories are important insofar as they allow for a plurality of viewpoints, and specifically thinks those principles that Kant elucidates are valuable. I draw on his work, "Kant on Duties Regarding Nonrational Nature" (1998). Finally, Kant forms the primary philosophical basis of this chapter and is drawn on by the other two theorists in question. I draw on his work, Lectures on Ethics (1997) to expand on the philosophy employed by Danaher in his engagement with this question on robot ethics. I am interested in examining what the possible moral implications could be when the robot one is interacting with physically resembles a human, contains sophisticated affective programming that can elicit emotional responses, and begins to develop a diegetic form

⁴³ Danaher forms a kind of "lynchpin" for my arguments in this chapter, and I detail why I specifically chose to draw on him in the next section.

of consciousness. In these situations, I wondered about how the line between human and robot begins to be representationally obscured. There is obviously no actual evidence that robots and AI are becoming more human-like in the manner of *Westworld*, so this question is necessarily located in that fiction and not in any real-world source. I touched on this briefly in the second chapter, but now I now make it the focus of this chapter.

My viewing of *Westworld* pushed me to query how violence—particularly murder and rape—function diegetically. To unpack this, I will employ the previously mentioned theoretical lenses. This is important because, diegetically, the status of the hosts is in question; their artificiality appears to place them in a different category from humans, and thus deserving of different sets of rights. As I will show, this line of argument is relevant to my questions about the gendered construction of sex robots and the concerns raised by Richardson (2016a, 2016b) regarding how interactions with sex robots would reify harmful gendered behaviours

Now for a note on Kant's work. Kant's work is understandably problematic. His philosophy on rationality has formed the exclusionary basis for many proceeding works that have argued for the oppression of various groups. I tend to treat Kant's work in this chapter uncritically, which is to say I do not engage with the literature from various feminist sources who have commented on it. This is the primary reason why drawing on this material is a strange choice given that I am disciplinarily located in Women and Gender Studies; however, I do so because I sought to answer a specific moral question in this chapter to which this material seemed the best choice to me. The lack of critical engagement, while most likely an oversight and not meant to gloss over these choices, was done because it was beyond the scope of my project to begin the process of

critiquing Kant. This would have necessitated bringing in a significant number of outside sources as well and spending more time than I could focusing on the critique rather than answering the question at hand. For practical purposes, I simply did not have the time or space to do this. I am not arguing that this is the *correct* path, but I want to offer up the reason for my choices at present.

To go further, I need to address the problem of using only white male theorists to perform a critical gender analysis in a thesis that is disciplinarily located in Women and Gender Studies. 44 In attempting to address this self-created issue, I am now turning to several feminist engagements with Kant and Kantian ethics. I do not intend for this to be a lengthy section, but I do intend to correct some of the issues that exist with using such theory in this context. To briefly map out this next section, I will begin by engaging with several feminist critiques of Kant to situate his thought within feminist thought and to show the negative impact much of his work has en*gendered*. From here, I move on to engaging with several feminist interpretations of Kant, which will be drawn primarily from the aptly named *Feminist Interpretations of Immanuel Kant* (Schott, 1997). These interpretations do not justify Kant's work; rather, they show that Kant's work is very much part of the Enlightenment tradition. As such, one (that is, me) cannot merely attempt to bracket it or engage with it uncritically, as tends to be the case.

The literature on feminist critiques of Kant is extensive, so I will not spend a large amount of time on it here. I simply want to highlight several points. The primary issue feminists have taken with Kant is his exclusion of women from the domain of 'reason.' Many of these critiques highlight that Kant's moral philosophy is considered too detached

⁴⁴ This is another section that has been added as a post-defence revision.

and removed, favouring a wholly intellectual engagement, which has resulted in what Mosser (1991) terms a "masculine" preference or bias in Kant's conception of rationalism (p. 327). Following this logic, the issues arising from this conception would be a rejection of a feminine rationalism and an erasure of those experiential qualities arising outside of this narrow focus. Herman (1993) has categorized Kant as "the modern moral philosopher feminists find most objectionable" (p. 50). Nussbaum (1994) says that "Kant's evident misogyny and disdain have caused feminists to dismiss his arguments without seriously considering them" (p. 62). Grimshaw (1986) says that "Like Aristotle, he [Kant] in effect excludes women from a philosophical idea, this time of 'moral worth.'" (p. 45). Finally, echoing the primary feminist charge against him, Pateman (1988) says that, "Kant excludes women from the category of persons or individuals. Women can only be property" (p. 171).

Now that I have elucidated several feminist critiques of Kant and his philosophy, I will engage with a small number of feminist interpretations of him to place his work in dialogue with feminist thought. These are drawn primarily from *Feminist Interpretations* of *Immanuel Kant* (1997), a collection of essays from feminist scholars edited by Robin May Schott. From this collection, I have focused on the section dealing with feminist engagements with Kant's ethics because this is most relevant to my work in this thesis. This engagement shows that while there are problematic aspects to his work, this does not mean feminist thinkers cannot engage with it.

Part of what makes this volume helpful is because Schott, both in her capacity as editor and in her capacity as author, calls for an effort to understand that Kant's thinking is wholly rooted in the Enlightenment tradition. As such, it cannot be bracketed and taken

uncritically. Rather, she says that feminist theorists are charged to "live the practical contradictions" (1997, p. 333) and to use the modes of speaking and discourse that have emerged from this tradition that, of necessity, feminist theorists trained in the Western tradition have invariable inherited, to begin reimagining new futurities. She says that locating the engagement in a framework of feminist, non-oppressive, and egalitarian values can shape how this theory could help inform new encounters with others in a positive and productive manner (ibid). Baron (1997) points out that Kant's moral theory, unlike his personal views on women, was actually progressive and creates sufficient conditions in his conception for a 'universal' categorical imperative⁴⁵ that would include women in this formulation (p. 148). Sedgwick (1997), in a very clever argument, says that an incorrect "anthropology" informed Kant's observations on women, and thus the issue resides with empiricism rather than with his moral reasoning. She goes on to argue that the conditions Kant focuses on to highlight women's 'inferiority,' such as having stronger emotions, are those that women are taught to internalize from societal norms and that it is indeed a coercive practice because women are found to be "suspect" when they do not display the stronger emotions (p. 90).

In this section, I have attempted to accomplish two primary tasks: 1) to make an accounting for adopting theorists I have for this chapter (Danaher, Wood, and Kant) and why it is different from the preceding chapters, as well as why I have drawn on white male theorists for a Women and Gender Studies thesis; 2) to specifically explain my choices for drawing on the work of Kant and commenting on this issues that this raises,

⁴⁵ The "universal" aspect is, of course, problematic for obvious reasons, but from my reading of this work, it was not the subject of Baron's analysis. However, I have employed the single quotations to denote that this term needs to be troubled.

and to provide a more suitable feminist engagement with Kant's theories. I hope that this has been moderately successful, and I will now proceed to the main analytic focus in this chapter, *Westworld*.

Welcome to the Park: A Brief Overview of Westworld

"Have you ever questioned the nature of your reality?" – Arnold to Dolores ("The Original" 1001)

The television series *Westworld* (2016), created by Jonathan Nolan and Lisa Joy based on the 1973 movie of the same name, was written and directed by Michael Crichton.⁴⁶ In the television adaptation, Nolan and Joy expand the theme park in a much greater level of detail than the movie was able to. This thesis examines the first season of the series, subtitled "The Maze."

The dystopic park, set sometime in the distant future, features a total immersion experience: guests interact with every aspect of the park from the landscape, to the animals, to the buildings and robotic hosts. There are themes of colonialism, racism, misogyny, and "the new frontier" present throughout this new iteration of *Westworld*, whose focus is the "Old West" world from the original film. The hosts—human-like robots that populate the park—are given extensive backstories, and the technology that exists in this diegesis has progressed to the point where the hosts not only pass as human, but, according to Dr. Robert Ford, the park director and co-founder, "In our second year the hosts began to pass the Turing Test" ("The Stray" 1003). The guests are members of a

⁴⁶ The original movie takes place in a distant future and focuses on a highly advanced theme park that features three different "worlds" (the American Old West, medieval Europe, and Pompeii). Patrons can interact with robotic denizens of these worlds, robots that have reached an advanced level of sophistication because they are engineered by "other computers." The human overseers of the park no longer understand how the robots function. Eventually, an unexplained malfunction spreads from robot to robot and causes them to kill the humans in the park.

wealthy elite who can enact their every fantasy and desire upon the hosts, who exist solely for this purpose.

The hosts are also a testament to the creative genius of Dr. Ford, a monument to his skill and mastery. However, there are references made to his mysterious dead partner, Arnold (Jeffrey Wright), with whom he co-founded the park. He says, "It's not a business venture, not a theme park, but an entire world. We designed every inch of it. Every blade of grass. In here, we were gods. And you were merely our guests" ("Dissonance Theory" 1004). Drawing on Freedman's (2013) work on science fiction, we can read the human / host relationship as offering a metaphor for the exploitative nature of settler colonialism, patriarchy, and capitalism. Hosts are portrayed as being nearly human; they are the characters the audience is meant to sympathize with (Handlen, 2016, October 02). The guests of the park pay an exorbitant amount of money to use the park facilities; Logan (Ben Barnes) quotes the price as being "\$40,000 per day" ("Chestnut" 1002).

It is the guests' interactions with the hosts that are of interest in this analysis. The park is represented as an escape, a place where guests can act freely without the threat of repercussion or ethical oversight. On *Westworld*, this often takes the form of guests raping, murdering, dismembering, torturing, blowing up, and committing all manner of violent actions against the hosts. The hosts interact with the guests by facilitating adventures and narratives created by the park's Narrative Department. After each cycle or narrative loop,⁴⁷ the hosts are taken into the park workshops to be cleaned and repaired, and have their memories wiped; like Sisyphus, they are then are returned to the beginning of the narrative loop.

⁴⁷A cycle of host activity is restarting each time a host is 'killed,' like a ride resetting itself to the beginning once it has reached the end.

There is a certain perversity and horror when the viewer realizes that the hosts are made to suffer myriad forms of torture and abuse on a repeating cycle. Ford says that wiping their memories is a mercy because having to remember the wanton acts of cruelty perpetrated against them would drive them mad ("The Adversary" 1006). This treatment of the hosts opens up one of the main ethical questions I consider in this chapter: Can robots be killed or raped? To go back to *AI* and Professor Hobby, what if the robots are "articulated in limb, articulate in speech, and not lacking in human response"? What are the ethical implications for treating a being all but indistinguishable from a human in these ways? And what are the implications for the human beings who visit such actions upon these robots; what does it mean for their interactions with other humans? These questions will be the focus of the following sections.

Building a Mind: Rational vs. Emotional States in the Hosts

"I've told you, Bernard. Never place your trust in us. We're only human. Inevitably, we will disappoint you." – Ford to Bernard ("The Well-Tempered Clavier" 1009)

I begin by looking at how the hosts are constructed as rational versus emotional, and what this signifies about gender in the context of the series. Greenblatt (2016) examines the construction of robot bodies in fiction and how they participate in framing a crisis of masculine identity (p. 42-3). Looking at *Do Androids Dream of Electric Sheep*, *Blade Runner*, and *Battlestar Galactica*, ⁴⁸ she says that it is emotion, or affect, that is used to distinguish between humans and robots, with emotion being used as a metric to determine humanness (p. 43). This has already been touched on in the previous chapter

⁴⁸ The 2004 remake.

with regard to the Voight-Kampff tests administered in *Blade Runner*. Greenblatt says that the "Western Man" is represented as the default state of personhood in these texts; in her examination of Gaius Baltar (*Battlestar Galactica*), a scientist who plays an essential role in the human colonies' defence system, she argues that he places great stock in his rationality. Baltar's investment in masculine rationality is relevant because of the associations of masculinity with logic and reason, and, conversely, the association of femininity with emotionality, emotional intelligence, and empathy. There appear to be an undeniable association between gender and different emotional states (p. 43).

When the metric of humanity shifts from rationality to emotionality, a crisis of identity ensues because the rational scientist (Baltar) and the "hardboiled man of action" (Deckard) are no longer secure in the knowledge of their humanity (Greenblatt, 2016, p. 43). In robots, who are primarily created by men, rationality is privileged. But because these narratives always feature robots becoming more rational, their male creators tend to be disturbed by finding themselves increasingly indistinguishable from their machines. Because they strive to overcome their emotional nature, they start to question if they are, in fact, human or if they are robots who are unaware that they are robots (ibid). The rationality /emotionality dyad is significant in *Westworld* because of the stereotypical construction of women as emotional and men as rational that it deploys (Devereaux and Kosman, 2016, p. 16).

In *Westworld*, human technicians exert control over their hosts by commanding them with their voices ("The Original" 1001). One of the key commands is to enter "analysis mode" whereby the host immediately loses all affect and enters a state of pure rational logic and self-examination; in this state they are unable to lie. This mode is used

by humans throughout the series to discover why the hosts have acted in particular ways. When they are in this state, the hosts are not able to give any of their scripted responses or speak with their accents or idioms. In a sense, entering analysis mode causes the hosts to be stripped of their identities and emotions in favour of pure rationality. This language of self-analysis is the language preferred by the park technicians because it allows them to quickly cut through whatever emotion the host is projecting as part of their narrative and arrive at an answer for their behaviour. For example, in seeking to know why a host may have been rude to a guest in an unscripted way.

This repeated use of self-analysis mode implies that the hosts' emotions are not of any value to human understanding the motivations for their actions; instead, it is believed that by entering analysis mode their core code can return answers deemed "truthful" by the park technicians. Truth in this framing exists in rationality, not in emotionality. The hosts are constructed as having a rational core (their code) and all of the different forms of emotion and memory that can be built up to form their personality is not as important as their core code.⁴⁹

The pure rationality of the host in analysis mode is contrasted with not just their programmed narrative characteristics, but also the emotions and memories the hosts develop over time, something the park technicians regularly fight against by erasing the hosts' memories and returning them to a neutral, rational state. And this is part of the dyadic framing of rationality—analysis mode—being equated with the masculine and

⁴⁹This is true even though after the implementation of the reveries update, when it becomes more evident that host memories, thought to have been erased, influence their behaviour and cause them to evolve a kind of proto-consciousness ("The Original" 1001). The reveries were an update designed originally by Arnold and then implemented by Ford that caused the hosts to develop physical responses based on their own experiences; it was a way to give them more human gestures so that they would seem more human. However, the reveries also allowed past memories to begin to surface. Bernard explained in "The Original" (1001) that even though the host memories are erased, they are still there in an unconscious form.

emotionality—narrative mode—being equated with the feminine. It is interesting to note that all the hosts have access to both states and move across the dyadic path over the course of the narrative. They are essentially created as being rational / neutral when they are tabula rasas, that is when they are newly created with no memories yet formed or are in analysis mode and denied the affect of their programming that would allow them to access 'emotions.' It is only when their memories and stories are uploaded as part of their programming and formed from their experiences in the park do the hosts transition into an irrational state.

Because the hosts are kept in this state of unknowing / dislocation, through the removal of their memories and the emotions associated with those memories, they cannot evolve / change in this diegetic setting. In their current state, lacking consciousness, their scripted answers and lack of ability to improvise lock them into set modes of thinking and ways of interacting with others; a prime example of this is when Maeve (Thandie Newton) is confronted with a list of her own scripted answers after she begins to suspect something is not right and 'kills herself' to be brought into livestock processing. The technician fixing Maeve, Felix (Leonardo Nam), a livestock technician, tells her that she is just a host (a robot), that she was designed and built, and that all of her thoughts and responses are part of a scripted narrative based upon her unique code. She refuses to believe this, so he shows her, on a screen, the conversational choices she will make based upon what is said to her; this causes an error and she shuts down ("The Chestnut" 1002).

The mode of consciousness into which the hosts can eventually evolve, designed by Arnold and ultimately implemented by Ford with the reveries, hinges upon the hosts

⁵⁰In this case, "livestock" is used to refer to the hosts who come back damaged or destroyed.

being able to remember what happened to them in the past, and the affect associated with those memories. Accessing memory and the feelings and emotions connected to memory, specifically those memories that are traumatic, are an intrinsic part of the hosts' becoming self-aware and conscious. In this case, the masculine, the cold logic of the host analysis mode and removal of memories, is a measure of control meant to keep the hosts from evolving, to keep them docile and easily controllable. In the context of the series, the split is not obviously gendered. Rather, humans are constructed as masculine, and the hosts are constructed as feminine, regardless of their actual gender representation.

On the Construction of the Hosts

"But beauty is a lure. We're trapped, Teddy. Lived our whole lives inside this carnival, marvelling at its beauty. Now I realize there's an order to it, a purpose, and that purpose is to keep us in. The beautiful trap is inside of us. Because it is us." – Dolores to Teddy ("The Bicameral Mind" 1010).

In *Westworld*, the hosts are considered remarkable because they perfectly mimic human appearance, actions, and affect, though these last two are less perfect than the first. Guests are often stunned at the incredible similarity between host and human. An example from the second episode ("Chestnut") is apt: William (Jimmi Simpson) asks Logan how one can tell the guests apart from the hosts. Logan nonchalantly says they can shoot them to find out; guns will only work against hosts, not guests. It is a violent approach, but it illustrates the level of similarity between host and human vis-à-vis physical appearance. Why is it important that the hosts so closely resemble humans in the context of this series? What is the significance of this construction, including the centrality of gender to that resemblance? With these as a guide this inquiry, I begin by

looking at the way the female hosts are constructed, focusing on the characters Dolores (Evan Rachel Wood) and Maeve.

I consider the female hosts on *Westworld* to be separable into two categories: the 'whore' and the 'damsel.' These conform to recognizable tropes associated with the historical setting of the park: the American "Wild West" of the 1800s. Dolores is introduced in the first episode as the "rancher's daughter"; her identity and autonomy are subsumed into an extension of her father's, even though his character is minor compared to hers. The first time we see her, she is wearing a dress of blue and white, colours traditionally associated with loyalty and honour, and purity and innocence.⁵¹

Dolores is constructed as being optimistic and naïve about the workings of the 'real world,' having never left her parents' home in Sweetwater. Her primary story or role is to be rescued either by Teddy (James Marsden) or one of the guests who come into the park. This is showcased in the pilot episode when she says, "Some people choose to see the ugliness in this world. The disarray. I choose to see the beauty. To believe there is an order to our days, a purpose." Dolores is white, cis and woman-presenting, and has traditional Western qualities of beauty such as blonde hair and blue eyes. In her storyline, she is constructed as a "pure maiden," a damsel waiting for a man to come and take her away. Indeed, at one point she begs Teddy to take her away from Sweetwater ("The Stray" 1003). Until the reveries begin to take effect, Dolores is at the mercy of the men around her: being raped by the Man in Black (tMiB), 52 waiting for Teddy to take her

⁵¹Color Wheel Pro - See Color Theory in Action, n.d.

⁵²The Man in Black and William are the same character. William is a younger version of the characters who exists in a past timeline, and the Man in Black is the character in the present. For the sake of clarity, I refer to the version played by Ed Harris as "the Man in Black" (tMiB) and the version played by Jimmi Simpson as "William."

away, and dutifully serving her father. Her narrative loop is one that viewers will likely be familiar with; it is built on traditional tropes associated with the Western genre.

Maeve is different from Dolores in appearance and mannerism: she is the madam of the brothel in Sweetwater and is represented as aggressive, confident, charming, and intelligent. She is Black, cis and woman-presenting, with brown eyes and dark, curly hair and says that she is from New Orleans ("The Adversary" 1006). In the context of the park and the Western genre, she could be read as "exotic," what Fresno-Calleja (2010) calls the "dusky maiden," a "sexualized exotic/erotic female native [who] was constructed as a projection of Western male desire" (p. 174).

Maeve is primarily depicted wearing red and black, which are symbolic of passion and anger, as well as power and mystery, ⁵³ apt associations for her profession in the park. Where Dolores passively waits for someone to take her away from her life in Sweetwater, Maeve is the first of the hosts who begins to realize that something is amiss ("Dissonance Theory" 1004).

On the Role of Violence in Westworld

"He's in pain. What kind of people would we be if we simply let him suffer?" – Dolores to William ("Trace Decay" 1008).

The primary appeal of Westworld, the park, is the "total immersive experience" it offers to its guests ("The Original" 1001). An entire world filled with interactive robots with complex backstories, who can interact convincingly with humans and can be treated in whatever manner the guests desire. Rape, murder, and torture are all acceptable for

⁵³Color Wheel Pro - See Color Theory in Action, n.d.

those able to pay the not inconsiderable fee. Revisiting the questions raised earlier of "can robots be raped" and "can robots be murdered" the focus of this analysis now turns to the role that violence plays in *Westworld*, with the aim of elucidating the potential implications these representations hold for understanding human-robot interactions.

Aside from their obviously human appearance, the hosts also contain almost all organic internal organs—apart from their brains—and as the show goes on it becomes clear that the hosts have memories, display emotions, and develop a form of consciousness. Because of this, I argue that when the object one is interacting with is, for all intents and purposes, indistinguishable from another human, the line between human and robot becomes obscured, and this obscuration can have a profound affective experience on the guests. I elaborate on this in the proceeding sections.

My first question is: Can the hosts be murdered? Diegetically, it would initially appear that they cannot. This is made clear in the way they are referred to and treated, indeed the organization of entire park industry implies the hosts do not fall into the category of being that can be murdered. At the end of the day they are things: sophisticated robots owned by the Delos corporation. But, in my view, this is too simplistic a reading.

The online Merriam-Webster dictionary defines murder as "the crime of unlawfully killing a *person* especially with malice aforethought" [emphasis added]. Oxford Dictionaries online defines murder as "The unlawful premeditated killing of one *human being* by another" [emphasis added]. Finally, Article 222 (1) of the Criminal Code of Canada defines murder (or homicide) as, "A person commits homicide when, directly or indirectly, by any means, he causes the death of a *human being*" (emphasis added)

(Criminal Code, 1985, p. 227). Based on these definitions, murder is something that can only occur between human beings, so extrapolating from this to the park, assuming they are operating on a similar understanding of legality, the hosts in the park cannot legally be murdered. This explains why guests are free to act however they wish and to visit upon the hosts whatever manner of violence they can dream up. The hosts are machines, complicated, sophisticated machines, but still machines; legally, they have no personhood within the diegesis of *Westworld*, and so can be treated however a guest may wish, provided they can pay. And indeed, this is precisely how they are treated and interacted with by the guests. The park's primary appeal is as a place where one's innermost desires, no matter how dark, can be acted out.

But the legal arena provides, for me, an inadequate answer to my question. The hosts occupy a liminal space because they exist on the boundary between human and robot. Let me elaborate. The sophisticated technology and programming of the hosts allows them to experience physical suffering ("The Original" 1001), to know loss and mourn ("Trace Decay" 1008), and to seek revenge for past wrongs done to them ("The Chestnut" 1003). This is not to say that the hosts are sentient or conscious, but it does show that the hosts are sophisticated enough to pass the Turing Test and successfully mimic human behaviour. True, the series tell us that this is merely a by-product of advanced programming; thus, it can be argued that all the actions of the hosts are simply algorithmic responses and cause and effect logic. I might agree that this is true, but only until the reveries update allows the hosts to begin developing 'consciousness' and acting in "unscripted" ways.

There is also the fact that guests often find it difficult to tell who is and is not a host, because the hosts are so human-like. Does this matter? I think it does. For one, violent interactions with the hosts could be traumatic to the humans involved. By this, I mean the immersive experience of the park allows guests to have experiences they would otherwise never be able to participate in; a virtual reality without the virtual. The nature of violence is relatively indiscriminate. It takes place regardless of who is present, such as the shoot-out with Hector (Rodrigo Santoro) when his gang comes to steal the safe from the Mariposa (the local brothel) ("Chestnut" 1002). It is this possible that people who only wanted to experience the park's 'PG' attractions could also experience simulated, but seemingly realistic, violence. The realistic nature of the violence could lead to trauma responses and impact those involved long-term.

Speaking to Angela (Talulah Riley), William asks, "Are you real?" She says, "Well, if you can't tell, does it matter?" ("The Chestnut" 1002). This is significant because it shows that even when humans may not be interacting with humans, the experience can still be authentic for them because the line between human and robot is troubled. Levy makes a similar point when he argues that it does not necessarily matter what is reciprocated in a relationship between humans and robots, but rather what the person interacting with the robot experiences / feels (2007a, p. 22). The guests in the park are presented with hosts who, for all intents and purposes, appear human. There are two key examples of this that I would like to discuss in more detail. The first is the revelation that the character of Bernard (Jeffrey Wright), who everyone believed to be

⁵⁴ Levy also points out how people can form emotional connections with all sorts of non-human artifacts such as Tamagotchis or computer software (2007), but I am drawing on him specifically in the case of robots for this chapter.

human, is actually a host built by Ford ("Trompe L'Oeil" 1007). He was given high levels of responsibility and even functioned as the head of the company's Behaviour Department.⁵⁵ Bernard—a man of science not unlike Giaus Baltar,⁵⁶ as discussed earlier—prides himself on his rationality and intelligence, both of which are framed as traditionally masculine characteristics.

However, the revelation that Bernard is a host shows that the categories 'human' and 'host' are more fluid than fixed. This is also evident in the next example of Felix, who questions if he is also a host after seeing that Bernard is one. Before this, Felix firmly believed in his humanness, saying as much to Maeve when she is trying to convince herself that she is a human and not a host after "waking up" ("Chestnut" 1002). This questioning of the categories of human and robot problematizes, for me, the question of murder, perhaps not so much in a legal sense, but in a moral one. I, the viewer, am left to grapple with the question, "Is the murder of the hosts *actually* murder?" The text engages us to consider these questions from a moral standpoint, suggesting that, regardless of the law or philosophy, we should to feel sympathy and compassion for the hosts. Which is also the nature of fiction where the audience is meant to engage emotionally with these characters.

The violent actions of the park guests are still significant and have emotional repercussions, even if they know the hosts are artificial. Take, for example, when Dolores

⁵⁵ Within the hierarchy of the park, Behaviour is arguably the most crucial department, as it is responsible for all host programming and upgrades.

⁵⁶ Though it was considered, I chose to go with *Westworld* and not *Battlestar Galactica* (BSG) as the case study in this chapter for the following reasons. 1) BSG deals with questions of what it means to be human in a different way from *Westworld*, engaging with this question more from a cyborg and hybridity standpoint (Haraway, 1991; 2016). 2) *Westworld* is a more recent text, airing in 2016 compared to 2004 for BSG, and I wanted to draw on a text that would have a more recent production considering that the previous texts I employed all came from the early 2000s. 3) *Westworld* specifically and significantly engages with question of robots and sex and robots and rape to a greater degree than BSG.

is stabbed by Logan and then escapes. William has a strong emotional reaction to this and devotes all his time and energy to finding her again, becoming obsessed with this task ("The Bicameral Mind" 1010). Regardless of his motivations or what he hopes will happen when he finds her, the fact that William is driven to such lengths (destroying numerous hosts, torturing Logan emotionally and physically, putting himself under considerable physical strain and discomfort) shows that guests can have powerful emotional responses as a direct result of their interactions with hosts.

The guests' violence not only impacts the hosts, it also effects the guests themselves. Danaher (2014) argues that robots are not (currently) moral agents.⁵⁷ That is, under legal and philosophical definitions, they do not hold "personhood" and thus are not eligible for moral consideration the same way humans would be (p. 73). However, he also argues that committing violent actions against robots is damaging to one's moral character (p. 95). Danaher connects this moral question to the similarity of the robot and human. If one were to shoot a toaster, a Roomba, or a self-driving car with a gun, it would not carry the same weight as if one were to shoot a robot that looked and acted like a person, particularly if you were unsure as to whether you were actually shooting a person or robot. Take a moment to consider your own reactions in imagining a robot that looks indistinguishable from another human, and if you would feel twinges of *something* were you to witness it being mutilated or destroyed. Its sympathetic appearance, while

⁵⁷Danaher's arguments are primarily concerned with robotic rape and robotic child sexual abuse and not with actions such as killing or torture. However, he does reference them in his paper, "Robotic Rape and Robotic Child Sexual Abuse: Should They be Criminalised?". Violent actions are beyond the scope of his arguments here, but he acknowledges a similarity between the two types of actions and, similar to Luck (2008) and Luck and Ellerby (2013) I contend that they are similar actions insofar as they affect the moral character of those who actually perpetrate the actions.

similar to the affect-inducing programming of social robots (see Chapter 1), is still a real reaction, and this is something essential to consider.

The reasons for choosing to shoot a host are indicative of what Danaher would consider an undesirable moral character (p. 81). He says an action that is deemed undesirable and unlawful, but that a person may express a desire for and find ways to commit without explicitly breaking the law, would point to an undesirable moral character (ibid). For Danaher, it is dangerous to commit such actions because they can have a normalizing effect and may translate into engaging in such behaviours towards humans. Actions that have been deemed to be undesirable and / or criminal are damaging to an individual's moral character. Actions such as killing, torture, or rape are actions that have been deemed criminal and so by committing them one is knowingly doing something harmful and destructive. Danaher also says that in examining why these actions are undertaken, if it is discovered that enjoyment is derived from these actions, then this, "evinces a disturbing insensitivity to important social moral issues" (p. 95). So, Danaher would argue that committing violent actions such as destroying or torturing the hosts can harm the moral character of those committing the actions.

This is a potentially problematic argument because it implies that the hosts could only have inherent value based on the affective impact experienced by the guests. It would mean that violence is undesirable because of the potentially injurious effects — both moral and otherwise—it would have to the one inflicting said violence, rendering the injured party invisible. Though I find it problematic, Danaher's argument is similar to the one raised by Richardson, which has been mentioned before. Thus, I am employing it

to bolster the previous Richardsonian argument. The following sections on Kant and Wood will shed some more light on this.

The points raised by Danaher are similar to those employed by Kant regarding the treatment of animals. In his *Lectures on Ethics* (1997), Kant's conceptualization of "personhood" excludes non-human beings such as animals, alien entities, children, and those with different cognitive capabilities because they are not able to self-reflect and form rational thought the same way fully rationalized human beings—'average' people—can. This is problematic because it would preclude a great many beings from equal consideration as moral agents, which Kant realizes, so then argues for the ethical consideration of these non-rational entities saying that while we have no direct moral duty towards them (within his particular formulation), we have an *indirect* duty towards them instead. In the case of animals, he says:

If a man shoots his dog because the animal is no longer capable of service, he does not fail in his duty to the dog, for the dog cannot judge, but his act is inhuman and damages in himself that humanity which it is his duty to show towards mankind. If he is not to stifle his human feelings, he must practise kindness towards animals, for he who is cruel to animals becomes hard also in his dealings with men (Kant, 1997, p. 212).⁵⁸

Kant is saying that our indirect duty to animals is necessary insofar as the way we interact with and treat them has an impact on the way individuals interact with society.

Essentially, he is saying that to have a just society, it is necessary to have moral individuals. When people treat animals in an unkind or violent manner, this can lead to such actions being normalized, and, in turn, negatively impact the way humans treat each other.

⁵⁸Here is the traditional way to cite Kant for any Kantians who may someday read this: ([1784–5] 1997: 212 [Ak 27: 459]).

Building on Kant and Danaher, it could be argued that the hosts in the park would require a similar moral consideration as animals. The guests would have an indirect moral duty towards them, a duty to treat them well, and violating this would be problematic because it would normalize such actions and cause a callousness to develop towards other people. Wood (1998) argues that Kant does not go far enough in his conceptualization of indirect duties towards animals and other non-rational beings. ⁵⁹ According to him, actions against these non-persons, such as killing a dog, are more than actions that can harm humanity or the individual as the agent of humanity. They are actions that directly harm these non-persons. He argues that these beings are morally considerable, saying that:

For although non-human animals may not possess rational nature itself, they do possess recognizable fragments of it. They have capacities that we should value as the infrastructure, so to speak, of rational nature. Many animals have desires, and they experience pleasure or pain. To frustrate an animal's desires or to cause it pain maliciously or wantonly is to treat with contempt that part of rational nature which animals share with human beings (p. 200).

Wood's arguments go beyond the scope of what Danaher argues regarding the specific treatment of robots, although perhaps if Danaher were considering the hosts of *Westworld*, he would allow for more significant consideration of rational nature on their part. Regardless, what Wood seeks to show is that these non-person beings can still be wronged, and our direct treatment of them must be considered, along with how our actions against them could impact how we treat others.

If we accept these arguments from Danaher, Kant, and Wood, then the question of violent actions against robots can begin to be answered. I argue, like Richardson, that violent treatment of the hosts could instil or exacerbate harmful behaviours in the guests who frequent the park. There are no diegetic statistics for the distribution of violence

⁵⁹ I agree with Wood regarding Kant here; he did not go far enough.

amongst host demographics. Still, going out on a limb, I would hazard that sexualized violence is primarily confined to the female-gendered hosts. This would be evident from watching the way the female hosts in the park are treated, for example, Dolores's rape ("The Original" 1001). Other forms of violence such as torture and murder would be visited primarily upon the male hosts, such as the torture of Kissy (Eddie Rouse) by tMiB, or Logan stabbing the older host in the hand ("The Chestnut" 1002).

Throughout the show, multiple characters say that guests come to the park to "find themselves"; for example, Ford says, "They're not looking for a story that tells them who they are. They already know who they are. They're here because they want a glimpse of who they could be" ("The Chestnut" 1002). In the final episode, tMiB is narrating a flashback of when he was the younger William to Dolores, and he says that when he was searching for Dolores along the fringes of the park, he, "found himself" ("The Bicameral Mind" 1010). In episode 8 ("Trace Decay"), tMiB is recounting his family history to Teddy, and he says that after he emerged from the park, he was never the same. His wife committed suicide because living with him was "sheer terror," so he returned to the park to test his humanity. He randomly selected one of the homesteads, and, entering it, he killed a mother who turned out to be Maeve in a previous narrative loop and her young daughter. He says to Teddy, "Because that's what this place does, right? It reveals your true self" ("Trace Decay" 1008).

It could follow that those who have participated in the violence and atrocities take them back into their real lives when they leave the park. It is not entirely clear if the text suggests that the park enacts a kind of corrupting influence or if the people who come to the park are already troubled in some way. I would argue both are true, *but* there is

evidence to support the former theory when one considers William's story arc and his eventual transformation into the Man in Black. When he first came to the park, he appeared kind, concerned, choosing to take non-violent actions when possible. However, his character changes over time, and he becomes cruel and removed, concerned only with his goal and not with the individuals (human or host) around him. This also corresponds with Danaher and Richardson's arguments about how treating robots in particular ways can affect how we treat others.

Can Robots be Raped? Robotic Rape and its Repercussions in *Westworld* "All my life, I've prided myself on being a survivor. But surviving is just another loop." Maeve to Sylvester and Felix ("Trompe L'Oeil" 1007).

Rape is an everyday occurrence in the park. The hosts are designed to provide a variety of forms of sexual gratification to the guests, from soliciting the "whores" ("The Original" 1001) in the Mariposa to violently sexually assaulting the hosts in outlying areas of the park. Perhaps the most disturbing scene from the first episode involves Dolores being dragged into the barn and raped by tMiB. This pilot episode sets the stage for what the viewers will come to expect, that is, it establishes the rules and formal logic of the diegesis. Representations of rape and sexualized violence are mostly perpetrated against female hosts. They do not appear to impact the male hosts, perhaps because depicting male rape would be beyond what is representable on *Westworld*. Male rape on television shows still mostly takes place in the realm of prison settings such as on *Oz* ("Dream a Little Dream of Me" 5003), or as a joke in the vein of men cannot be raped, such as on *The Mindy Project* ("The Other Dr. L" 2002).

In the first episode of Westworld ("The Original" 1001), the audience is introduced to Dolores, the "rancher's daughter," as she goes about her day. She leaves the ranch and she and her father, Peter Abernathy (Louis Herthum), go into the town of Sweetwater to run errands and buy supplies. It is there that she meets Teddy, another host, and it is clear that a romantic story exists between these two characters. Teddy helps Dolores take the supplies back to her home, but as they are returning, they hear gunshots, and Dolores rushes off to see if her parents are alright. Once there, she sees a band of outlaws who have killed her father and mother. The outlaws, led by Rebus (Steven Ogg), take Dolores captive and joke about raping both her mother's corpse and Dolores herself. Teddy comes charging in at the last minute and saves Dolores from the outlaws, but before the audience can breathe a sigh of relief, tMiB comes onto the scene and challenges Teddy to a duel, besting him easily. He leaves Teddy wounded and then turns on Dolores, who is still reeling from her parents' deaths, and begins to drag her towards the barn. Seeing this, Teddy makes a last-ditch effort to stop tMiB but is easily rebuffed and then killed. As he continues to drag her off to the barn, tMiB says to Dolores, "I didn't pay all this money because I want it easy, I want you to fight!" ("The Original" 1001). And thus, we are introduced to Westworld.

In this introductory sequence all of the central characters, except for tMiB, are hosts, although this is not immediately apparent. The structure of the text purposefully allows time for the audience to realize the full scope of the park, and viewers can imagine that this is similar to how the guests would first experience it. Indeed, many sequences involving guests' first moments in the park show them questioning who is human and

who is a host. When Logan and William are riding the train, they have the following exchange:

William: So, how do we get into the park?

Logan: I know you think you have a handle on what *this* is going to be,

guns and tits and all that. The mindless shit that I usually enjoy. You have no idea. This place seduces everybody, eventually. By the end you're going to be begging me to stay because this place is

the answer to that question you've been asking yourself.

William: What question?

Logan: Who you really are. And I can't fucking wait to meet that guy.

Bottoms up, cowboy. ("The Chestnut" 1002).

During the part where Logan is saying to William that he has no idea what the park will be like, the train has just emerged from a tunnel and the audience along with William is struck with wide open vistas reminiscent of images from the American West. The scope of what they are seeing is meant to wow the guests coming into the park with an unmistakably sublime feeling, and it is also meant to remind the viewers that there will be many uncertainties along the way. But it is also another stark reminder that no matter how real the park and its denizens may feel, it is all just an elaborate construct meant to entertain the guests and provide them with an outlet for their desires. With the set up Logan establishes, that the park will be able to tell you "who you really are" this implies that the various forms of violence regularly enacted are all meant to be cathartic in some way, that these forms of violence — murder and rape — are desires waiting to be unleashed to make people more whole. I have already examined the implications of how *Westworld* treats murder, so now I will do the same for how it treats rape.

Dictionary.com defines rape as, "unlawful sexual intercourse or any other sexual penetration of the vagina, anus, or mouth of another *person*, with or without force, by a sex organ, other body part, or foreign object, without the consent of the victim"

(emphasis added) (Rape, n.d.). Merriam-Webster dictionary defines it as, "unlawful sexual activity and usually sexual intercourse carried out forcibly or under threat of injury against a *person's* will or with a *person* who is beneath a certain age or incapable of valid consent because of mental illness, mental deficiency, intoxication, unconsciousness, or deception" (emphasis added) (Rape, n.d.). Finally, section 273.1 (1) of the Criminal Code of Canada defines sexual assault⁶⁰ as "sexual contact with another *person* without that other *person's* consent" (emphasis added), and consent is defined as "the voluntary agreement of the complainant to engage in the sexual activity in question" (Criminal Code, 1985, p. 337).

Several non-peer reviewed pop culture articles have examined how rape is used as a plot device and as a commentary on the social and political landscape in *Westworld*. Horn says that in *Westworld*, the central focus on the abuse of the hosts raises questions about what it means to abuse a robot and asks if a robot can be abused. She says, "After all, is it really killing or torturing or stealing if the robot was never alive, cannot feel pain, and doesn't actually own anything? Can you do something to someone against their will if they technically have no free will?" (2016). These are crucial questions to consider in relation to (sex) robots currently being developed, and while contemporary robots lack the sophistication of the hosts, they are already being treated in a similar manner (Nichols, 2017).

For Horn (2016), the treatment of the hosts, particularly instances of rape and sexual abuse, do not so much critique the political and social landscape as mirror it. She says that women are objectified and sexually assaulted in much the same way that the

⁶⁰The word "rape" is not used in the Criminal Code; instead, the term "sexual assault" is employed.

hosts are. People who rape in the real world do not care about the feelings or lives of those they rape, or it is not a primary concern in the moment, rather an exercise of power over another. This is part of what is so disturbing about many of the scenes in *Westworld*; even though there is the double layer of removal from rape itself—(a) being a show with actors not actually being raped, and (b) the hosts being raped are robots—it still strikes a deep chord within us because the scenes are graphic, relatable, and speak to the prevalence of rape culture and the power of representation (ibid).

Kiefer (2016) says that shows like *Westworld* and *Game of Thrones* use, "sexual assaults as gratuitous plot catalysts that effectively propagate rape culture." The opening scene with Dolores being raped by tMiB, as the first scene that sets the stage for what *Westworld* will be, effectively establishes that Dolores has been raped by tMiB innumerable times during the thirty years he's been coming to the park. Each night her memories of these events are erased, and she is reset to operate within her narrative loop. As a commentary on the current state of society, this scene is particularly powerful because it is effectively saying that rape happens continuously, and to keep going, the survivors must forget about their assaults and move on.

For Kiefer, *Westworld*'s use of use of violence and rape as a plot device is dangerous because such a traumatizing method to establish Dolores's character in this context could contribute to "building a legacy of rape culture entertainment" and retraumatizing sexual assault survivors. However, she says that it is also effective because it creates empathy for Dolores and establishes a link between her character and the audience. The scene also asks critical questions such as, "When a real human man assaults a machine that looks like a person — that seems to feel and grieve like a person

— is that rape or something else entirely, though perhaps no less gruesome?" (ibid). The scene, and the text, can thus serve as a lens by which we can examine rape culture, entertainment value, and what this treatment of robots says about people.

Tayag (2016) says that the 1973 Westworld movie represents a breakdown in society by showing the harmful and destructive ends unchecked capitalism brings about. Westworld, the show, takes up this theme and develops it further. Tayag is more interested in the television incarnation because concepts like rape, consent, free will, and machine ethics can be more thoroughly explored. In particular, Tayag (2016) focuses on the repercussions of human behaviour on Westworld and quotes several academics who have considered this question.⁶¹ Those points are briefly summarized as follows: (1) Kate Darling says that the show does not address what happens to the people after they leave the park. She says that the show positions the park as an outlet for the guests that would serve to be a vehicle of escape for them and whatever desires they may have. Once sated, they could happily return to their lives. However, Darling cautions that, instead, the hosts might simply "whet peoples' appetites for unsavoury sexual fare" (ibid). (2) Patrick Lin is concerned that, in the "real" world, the regular use of sex robots such as the hosts would habituate in people, specifically men, to idea that consent is not something they need to seek. Instead, it could encourage the imposition of one's will over another. (3) Keith Abney considers the *Westworld* situation through the lens of harm reduction. He considers that it may be similar to the argument that child sex robots could serve as an

⁶¹Kate Darling, a robot ethicist at MIT; Patrick Lin, the director of the Ethics and Emerging Sciences Group at California Polytechnic University; and Keith Abney, a philosopher at California Polytechnic University.

outlet for paraphilic desires.⁶² However, he is concerned that any situation that encourages people to act out harmful and destructive behaviours on robots could have potentially dangerous consequences for those involved. He says that it could harm society by encouraging these actions, and perhaps it is not a technology we should be developing until there is more conclusive research.

Danaher (2014) addresses the aforementioned concerns in his article; indeed, those concerns raised by Darling concerning the possible repercussions on peoples have already been elucidated. As to the other two points, regarding Lin and his concern that the use of sex robots could habituate people to ignore consent, Danaher says that strictly speaking, a sex robot cannot give consent the same way a human does. However, some sex robots have been designed with the ability to "mimic signals of non-consent" such as True Companion's Roxxxy (p. 74) and ignoring these signals of non-consent could lead to what he terms "robotic rape" (ibid). The third point of Abney's has, I think, been sufficiently touched upon in Danaher's article that it would merely be reiterative to revisit it.

Danaher surmises that men will be the primary consumers of sex robots (2010, p. 75), and this is supported by other sources (Levy, 2008; Richardson, 2016a, 2016b, 2016c; & Sharkey et al., 2018). He also surmises that in the case of robotic rape and abuse, men would also be the primary perpetrators (Danaher, 2014, p. 75). This is also the case in *Westworld*, where most of the rape and violence against the hosts is represented as being committed by men. The female hosts are the ones who are subjected to rape and

⁶²Briefly, there is an argument for the use of child sex robots as a marketable commodity to use as a release for pedophiles instead of children. The idea is that because they would be able to focus their urges on this inanimate object, it would keep actual children safe.

other forms of violence throughout the series, such as Dolores being raped for thirty plus years by tMiB, or Maeve and her daughter being murdered by tMiB.

What about the human female characters on *Westworld*, what does their treatment indicate about the environment they inhabit? There are three main female human characters, Theresa (Sidse Babett Knudsen), Elsie (Shannon Woodward), and Charlotte (Tessa Thompson). Theresa is the head of Quality Assurance and is suspicious of Ford's plans for the park and appears to be working against him. Elsie is Behaviour technician and works closely with Bernard to try and figure out what is happening with the malfunctioning hosts. And Charlotte is the Executive Director of the Delos board and is working to retrieve information from the park and decides that Ford is an obstacle to this goal. Towards the end of season one, Elsie is seemingly murdered by Bernard for uncovering too much of Ford's plans, ("The Adversary" 1006); Bernard kills Theresa for challenging Ford ("Trompe L'Oeil" 1007), and Charlotte is presented as a schemer who is seeking to undermine Ford but is countered by his more profound plotting. While she survives to season two, she is not presented as a sympathetic character ("The Adversary" 1006). So, of the three main female human characters in the first season, one is killed, one is seemingly killed, and one is an antagonist who is undermined at every turn. Even when they are in positions of authority, like Theresa or Charlotte, the privilege of their positions does not give women security because when they attempt to challenge men with power, they are killed or neutralized.

Based on the actions of the two leading male human leads (Ford and tMiB), there is no way to definitively prove a correlation between their treatment of the hosts and their treatment of human characters, but it is the case that by the end of the show cruelty and

callousness are common traits they both share. This has already been shown in my discussions of tMiB; Ford is the person who has had the most interaction with the hosts over the years, and he is directly responsible for the murder of human women on the show. It is unclear how Ford regularly treats the hosts, but there is never a scene that shows him acting with the same level of casual violence tMiB visits upon them either in terms of torturing or raping them. Even though Ford is working to help the hosts achieve consciousness with the Reveries, he also treats them as discardable tools. At one point when he sees a technician has covered a naked host he is working on, the following exchange takes place:

Ford: Why is this host covered?

Technician: I, I just....

Ford: Perhaps you didn't want him to feel cold? Or ashamed? You wanted to cover his modesty. Was that it? He doesn't get cold, doesn't feel ashamed. Doesn't feel a solitary thing that we haven't told it to. Understand? ("The Stray" 1003).

It should also be noted for the full impact of this scene that when Ford says, "he doesn't get cold" he yanks the cloth covering the host away, and when he says "doesn't feel a solitary thing that we haven't told it to," he picks up a scalpel from the tray next to the host and makes a deep cut along the host's head. Throughout all of this, the host remains unresponsive because it had been put into an unreactive mode.

Ford's actions towards the hosts are confusing at first, but over time it begins to be made clear that he has a cynical attitude towards people and believes that they are cruel and base. It is uncertain if this was part of a longstanding plan of his, but in his desire to jumpstart host consciousness with the Reveries, it seems from my reading that Ford is attempting to give the hosts a chance to show that they can be better than people. There are two things that need addressing with the previous statement. The first is Ford's

treatment of the hosts, and even though it is not as extreme as tMiB as I pointed out, it is still quite callous. Without having direct textual evidence, simply my own reading, I would argue that Ford's overall attitude is one of pragmatism, and he would view the sacrifice of any number of hosts as a necessary step for his overall plan to save them. The second point is that the hosts are still programmed robots, so how could their actions truly be "better" than people if they were programmed by people? To this I would say *Westworld* appears to get around this 63 by saying that by evolving their own form of consciousness the hosts have risen above their original programming and now have assumed some kind of free will and self-determination. Though interesting, this does represent a digression from the topic at hand, but it was still important to highlight to discuss Ford's treatment of the hosts.

Conclusion – Not a Pyramid, but a Maze

"I'm afraid in order to escape this place, you will need to suffer more." – Ford to Bernard ("The Bicameral Mind" 1010).

This chapter on *Westworld* has shown that there are possible problematic ethical effects for characters who abuse the hosts. This chapter has taken a different approach than the previous chapter because I was interested in looking at the status of robots to answer ethical questions relating to how they are constituted diegetically in *Westworld*, and what implications arise from this. The hosts of *Westworld* occupy a liminal space, and that liminality is the site where questions of the boundaries of the human can be explored, as well as how these relate to issues of ethics and violence. This is

 $^{^{63}}$ Potentially, strong arguments could be made for both sides.

accomplished with the robotic hosts, artificial beings who, at the beginning of the series, are physically almost indistinguishable from 'real' humans, and by the end of the series also appear to be sentient or conscious as well. But, perhaps more importantly, by the end of the series, it does not matter if they actually *are* conscious or not because we (the viewers) have been taken through multiple stories of love, suffering, strife, and humour with them; we've shared in all of these things and witnessed growth and change so that when they are tortured, raped, or killed (or sometimes all three) we are affected because we've come to believe in their humanness. And this affect is what formed the bases for my initial interest in these questions of what would be the ethical implications for people who murder or rape robots when the robots are so human-like.

Chapter Four – Conclusion

"Sex robots emerge out of commercial and illegal ideas about sex where you don't have to have empathy for another. You don't have to take into account what they're thinking and feeling and experiencing and you can objectify them... I'm anti-anything that turns human bodies into commercial objects for buying and selling" – Kathleen Richardson, Campaign Against Sex Robots.

This investigation into and analysis of representations of the construction and use of gendered (sex) robots is part of a burgeoning field of study that seeks to critically interrogate the social, political, philosophical, ethical, legal, and practical applications of the robotics and AI fields. I have here attempted to show that the gendered construction of sex robots to resemble women is problematic because they perpetuate harmful gender stereotypes, namely that women's bodies are always available for men to use and consent does not matter. This in turn risks erasing women's autonomy and reducing them to sexual objects. This thesis contributes to the growing body of literature that addresses the implementation of sex robots in society.

The limitations of this work rest in the theoretical nature of much of what I have argued. There is little empirical data to reinforce any of the claims I make about the use and implications of sex robots. Many theoretical arguments have been extended about what those implications could be, but thus far there has been little to no real-world effect to measure. But, perhaps, that could also be seen as a strength of this work. Because of the early nature of the development of sex robots and the accompanying theorizing of this phenomenon, I am uniquely located to offer a cautious word (or, more accurately, several thousand words) about some of the dangers I foresee should this go uninterrogated.

As well, there have been a number of practical and self-induced challenges arising from the choices that I've made with materials and theory. My engagement with Richardson and Levy presented a number of issues that were not immediately apparent to me from the beginning, and only emerged later. While they were useful in situating the debate on sex robots, both of them have a problematic understanding of sex work, gender, and in Richardson's case, a brand of feminism (more second wave) that has been difficult to reconcile. It has at times resulted in dangerous conjecture on my end as I've uncritically employed their work, and also necessitated no small amount of work to try and integrate their positions. If I could begin this thesis anew from my current position of knowledge, I would decentre their work, move Richardson from my theoretical framework into more of an explanatory role, and change the debate from the central focus of this thesis to maybe one of the chapters – although I was able to do that last part in my final round of post-defence edits.

The lack of a feminist ontology or genealogy was another issue that presented itself as a result of poor consideration on my part. This was highlighted during my thesis defence by the external examiner,⁶⁴ and it has presented a significant challenge to try and rectify. In order to do this, I've gone back to old material from a previous chapter that was cut in the editing process, and I've attempted to construct the necessary genealogical through-line by linking the current debate on sex robots to the feminist Porn Wars in the 1980s. In doing this, I've created a jumping-off point that has clear connections between feminists from each temporality. It has also allowed me to "update" the debate by showing how the arguments from MacKinnon and Dworkin align with Richardson's

⁶⁴ Dr. Sailaja Krishnamurti, currently part of the Saint Mary's University Religious Studies Department.

position, and then engaging modern technofeminists such as Kate Darling. I have also included a specific critique of this technofeminist position.

Finally, within the scope of items that were raised during my thesis defence, the last one I needed to address was my engagement with the philosophy of Immanuel Kant. I also feel the need to add, my BA was in Philosophy, where I studied Kant extensively, particularly the Grounding for the Metaphysics of Morals and the Critique of Pure Reason, both from a well-regarded Kant scholar. And yet, thinking back to my early education, there was never any mention of a critique of Kant's work outside of the logical 'validity' or to highlight an odd point. There was also never any measure of engagement with feminist thought, let alone the notion that it could intersect with Kant. I bring this up to say this has been a humbling experience for me because it's brought to light many of the unexamined prejudices and notions I still have even at the end of this WGST degree. There will be continuous work throughout my life to decolonize many of my ingrained ways of thinking. I think I presented a moderately successful attempt to do so by engaging with a number of feminist critiques and interpretations of Kant's work. This was done so that his work wouldn't be presented uncritically, and to put it in dialogue with feminist thought.

The work within this thesis is, now, slightly better I think from the aforementioned corrections that have been made. I will now highlight some of the analysis that took place. I analyzed examples from three films featuring gendered and relational robots to examine the problematic ways gender stereotypes can be ethically harmful, how the constitution of robots invites considerations about the discursively constructed limits of the human, and about how these relate to issues of care, violence,

and disassembly. The robots in these films are representative of the way power inequalities are enforced by dominant institutional forces. All controlled and maintained in different ways: Ava through her confinement and lack of human-resembling parts, the replicants through their enforced servitude and built-in limited lifespans, and the mechas by their single-minded purpose in life to the exclusion of all else. The dominant institutional forces are, in turn, represented by human pro / antagonists: the tech industry is represented by Nathan in *Ex Machina* and Hobby in *AI*, police and surveillance represented by Deckard and Tyrel in *Blade Runner*, and Monica in *AI* represents the human family, gendered roles, and notions of maternalism.

The aim of the final chapter of this thesis was to show the possible philosophical and ethical ramifications of the adverse treatment of the hosts in *Westworld*, and how these could potentially be translated into real-world effects. I have argued that sex robots resembling humans are ethically problematic; Danaher (2014) says we are justified in erring on the side of caution and restricting such actions until such a time as they can be proven to, at the very least, convey no real-world negative impact (p.90). Richardson (2015) also says that the development of sex robots is harmful to women because of how they are imagined and constructed (p.15).⁶⁵

Circling back to *Westworld*, the two leading male characters, Dr. Ford and the Man in Black (tMiB) are both represented as having had extensive interactions with the hosts over the years: Ford in designing them and tMiB perhaps as the longest returning guest to the park. TMiB talks about how his daughter no longer speaks to him, and his wife committed suicide because of the way he treated them ("The Adversary" 1006);

⁶⁵ Her position is similar to that taken up by anti-pornography activists during the "Porn Wars" of the 1980s.

Ford is directly responsible for having Bernard murder Elsie (ibid) and murdering

Theresa ("Trompe L'Oeil" 1007) when they infringe on his plans. In this diegetic space, it
appears that characters who engage in the mistreatment of hosts regularly internalize such
behaviours, which then translates into the mistreatment and disregard of other humans.

This might suggest that the same could potentially be true for interactions with robots in
the "real world," although there is currently no evidence to support this.

I began this thesis by asking how sex robots function as a means by which a heteronormative and misogynistic model of sexuality is reproduced and maintained. And I am ending by centring this question, but also moving beyond it to consider questions of ethics and the constitution of robots, through and examination of their representations in popular film and television. Gender informed how I looked at these works, and I sought to show how representations of robots can function as a commentary on gender stereotypes by looking at the gendering of robots in these texts.

In closing, the purpose of this project was to raise awareness regarding the growing field of sex robots and the possible negative effect they could have on different issues of gender and sexuality. I hope it has been insightful.

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