



From Fear of the Other and the “New Exotic Lover” to Posthuman Love:
The Representation of Female Gendered Intelligent Machines in *Do Androids Dream of
Electric Sheep?*, *Galatea 2.2*, *Ex Machina* and *Her*.

Lavinia Suij 3824284
15,434 words
MA Thesis Literature and Cultural Criticism
Supervisor: Dr. Kári Driscoll
Second reader: Dr. Birgit Kaiser
27th of November 2015

Table of Contents

Introduction.....	3
Chapter I: Posthumanist Theory and Science Fiction.....	10
Chapter II: Playing God and the Fear of Intelligent Machines.....	20
Chapter III: The Fembot as the “New Exotic Lover”.....	29
Chapter IV: Companionship and Posthuman Love.....	37
Conclusion.....	46
Works cited.....	48

Introduction

In *The Posthuman* Rosi Braidotti argues that “Not all of us can say, with any degree of certainty, that we have always been human, or that we are only that” (1). She is one of the most prominent theorists in the field of posthumanism, which argues that the myth of one humanity always leads to the exclusion of some humans who do not identify with the universalism that humanism presupposes. Posthumanism emerged in the late twentieth century and acknowledges that radical changes in Western economy and politics together with technological developments destabilise the traditional humanist subject that Descartes and other philosophers proposed during the Renaissance and which influenced many Enlightenment thinkers. During the Enlightenment, humanism challenged religion as the only truth and instead relied on scientific method and human reason to discover truths and structure the human community. It relies on the centrality of the human and believes in reason, autonomy and moral equality as the foundation of human existence. The humanist ideal is not just the standard for individuals; it is a hegemonic cultural model (Braidotti 13-14).

Humanism’s anthropocentrism places Man at the centre of world history. It presupposes a universalism that binds all humans by their human nature based on perfectibility, autonomy and self-determination. According to anti-humanist thinkers, humanism as a historical and cultural construct, a mode of politics and ethics, is no longer tenable, because it is self-centred and ignorant to the dynamic inter-connectedness of the world in which the human exists as a complex subject, together with animals and machines. Posthumanism wants to rethink the idea of an original unity, anthropocentrism and humanism’s “faith in the unique self-regulating and intrinsically moral power of human reason” (Braidotti 13). Braidotti traces the beginning of posthumanism back to the anti-humanism of radical thinkers of the 1968 generation. In 1966, French philosopher Michel Foucault declared the ‘death of Man’ in *The Order of Things* in which he attacked humanism’s placement of Man at the centre of world

history (Foucault 23). The humanist ideal is called back and its formerly dominant subject is freed of its illusion that it was in charge of historical progress (Braidotti 23). Feminist, decolonisation, antiracism, antinuclear and pacifist movements of the 1960 and 1970s all opposed the humanist idea of universalism, self-regulating ethical behaviour and the separation between what is given (nature) and what is constructed (culture). Humanism's cultural logic is based on binary oppositions between identities, but when it comes to identity formation this normativity, its essentialist perspective of *the* human, creates structural 'others.' Normativity has produced nothing but sameness and to be different from the norm, the liberal humanist subject that has autonomy and self-determination, is to be less than the universal man constructed by the humanist doctrine. Women, people of colour, animals and intelligent machines are seen as different from the universal man. The humanist subject defines itself by what he is not and justifies its violent relationship to sexualised, racialised and naturalised others (Braidotti 144). However, humanism cannot simply be condemned and Braidotti argues that "The human is a normative convention, which does not make it inherently negative, just highly regulatory and hence instrumental of exclusion and discrimination" (26). Posthumanism wants to breach the boundaries that humanist thinking has constructed and attempts to look for alternatives. Braidotti wants to replace the social constructivist approach that distinguishes between nature and culture by a non-dualistic understanding of nature-culture interaction of "the self-organising (auto-poietic) force of living matter" (3). According to Neil Badmington posthumanism is not solely based on anti-humanism, because there is no definite break from humanist thinking. The apocalyptic accounts of "the end of Man" which many critics announce is not so simple and in "Theorizing Posthumanism" he argues that they "ignore humanism's capacity for regeneration and, quite literally, recapitulation" (11). In many cases, humanism persists and Badmington proposes to use deconstruction like French philosopher Jacques Derrida, whose

approach is different from ideas of the death of Man that Foucault and other anti-humanist thinkers propose.

Posthumanism operates in the discourse of critical and literary theory and is closely related to science and technology studies, because it researches how technological enhancements change the position of the human subject. The twentieth century saw the use of technological inventions like weapons of mass destruction, the application of the first pacemaker, the invention of the first computer and the rise of the internet. These rapid changes in the social structure, in politics and ethics aroused anxiety and raised questions on how to shape human's relationship to technology. Questions of human disembodiment, 'cyborgisation' and apocalyptic accounts of human extinction are all part of the posthumanist debate. On the one hand, transhumanists laud the many possibilities that technology brings and they dream of prolonging human life by uploading a person's consciousness into a computer system. These fantasies are pervasive in transhumanist discourse, which deals with development of biotechnology to enhance human life. On the other, posthumanists do not support these ideas because they continue the Cartesian ideal of the mind/body separation that humanism supports. In *How We Became Posthuman*, published in 1999, theorist N. Katherine Hayles criticises the separation between information and matter and between mind and body. The mind can live forever in informational patterns, but Hayles argues that the human body and materiality in its whole should not be left behind, because just like machines human life needs embodiment and exists in a material world of great complexity. She wants to prevent the rewriting of Cartesian disembodiment into "prevailing concepts of subjectivity" (Hayles 5) because the body is not an object of control, but is equally important. She argues that "I see the deconstruction of the liberal humanist subject as an opportunity to put back into picture the flesh that continues to be erased in contemporary discussions about cybernetic subjects" (Hayles 5).

Another posthumanist work that investigates the implications of technological enhancements in the late twentieth century is “A Cyborg Manifesto” (1985) by Donna Haraway. She argues that the human is a cybernetic organism; a cyborg that is culturally programmed and is not far removed from intelligent machines (Haraway 2190). When artificial intelligence qualifies as conscious because its computer mind learns from experience, the human mind is no longer essentially different from a computer. This puts the liberal humanist idea of the mind that uses the body as a vessel into trouble, because what humanism has called the mind is no longer human exclusive and not all humans use their mind in the same way, which has ethical consequences on how humans should treat nonhuman others. Haraway poses the image of the cyborg to break down boundaries between humans, animals and machines and to change women’s experience in the late twentieth century (2190). The position of women in science fiction in connection to posthumanism is worth researching, because women are ‘others’ that humanism culturally constructs and discriminates against. Haraway argues that “The cyborgs populating feminist science fiction make very problematic the statuses of man or woman, human, artifact, member of a race, individual identity, or body” (2218). Feminist science fiction writers like Ursula K. Le Guin and Octavia Butler address issues of race and gender in their works and imagine possible worlds that are not anthropocentric and place women in alternative communities. But how do non-feminist science fiction works that question human uniqueness by raising humanlike intelligent machines as characters address gender issues? In science fiction female characters appear in different forms as humans or as non-human machines and often have biblical or mythological origins like the creation myth of Adam and Eve and the Pygmalion myth. When a human creates a robot, the robot is essentially genderless, but falls into gender categories that Western culture has constructed. Moreover, robots in science fiction are not just adapted from electronic machines that originate in the rise of Industrialism, but have a longer history

as cultural imagery. In modern times, Man wants to play God by creating life, often in the form of creatures that look like humans. This causes anxiety, because using science to create lively machines can have disastrous results like the experiment in Mary Shelley's *Frankenstein*.

Through the analysis of the science fiction novels *Do Androids Dream of Electric Sheep?* and *Galatea 2.2* and the films *Her* and *Ex Machina* this thesis will show that female gendered intelligent machines destabilise the humanist ideal of human uniqueness in terms of cognition and empathy but confirm persistent cultural ideas of gender roles that are based in humanism. Furthermore, as will become clear from Judith Butler's *Gender Trouble*, gender is a cultural fiction and attributing gender to intelligent machines deconstructs Western culture's idea that gender is part of human nature; that femininity and masculinity are in binary opposition and the only two options to identify with. The destabilisation of human uniqueness causes fear of humanlike androids in Philip K. Dick's Cold War novel *Do Androids Dream of Electric Sheep?* because some of the androids are unaware that they are not actually human beings and because they show empathy towards other androids and humans. The 2015 science fiction thriller *Ex Machina* shows that men obsessed with power rely on culturally established ideas of women, but have trouble controlling artificial intelligence that evolve beyond their expectations. Alternatively, Richard Powers' 1995 novel *Galatea 2.2* tells the story of a professor who has a meaningful relationship with the artificial intelligence he has built, which shows exhilaration and human-machine companionship instead of fear or domination. In addition, the 2013 romantic film *Her* shows how operating system Samantha is at the heart of posthuman interconnectedness because she is remarkably dynamic, evolves from her experiences and is admired by her depressed human companion Theodore. The purpose of this thesis is to point out a rewriting of humanism and to work through the texts in a posthumanist manner; in what ways do the works question human uniqueness that is based on

a shared essence and in what ways do they reconfirm culturally constructed ideas of gender that are reflected on intelligent machines? The main concern of this research will be gender, because the works show how Western culture's ideas of women are attributed to intelligent machines to secure human's domination over its structural others. In science fiction female gendered intelligent machines often depend on their attractiveness to get things done, unlike artificial intelligence of the male gender that are primarily judged on their cognition instead of their sexiness. Attributing gender to intelligent machines deconstructs the belief that gender is part of human essence and at the same time shows how much Western humanist thought depends on the binary opposition between man and woman. In the cultural discourse of Western society, gender is regarded as a fixed part of an individual's identity, but according to Butler, it is a cultural construct; a performance based on dominant ideas of masculinity and femininity. In addition to the machine as a structural other, women are culturally differentiated from men and the patriarchy bases women's identity on their femininity. The humanlike androids in *Do Androids Dream of Electric Sheep?* and *Ex Machina* are gendered female and have to use their attractiveness to show that they are not essentially different from humans, but even Helen in *Galatea 2.2* and Samantha in *Her*, two artificial intelligences without bodies, are gendered, because it makes it easier for humans to engage in human-machine relationships.

The theoretical framework of this thesis consists of Braidotti's *The Posthuman*, Judith Butler's *Gender Trouble*, Donna Haraway's "A Cyborg Manifesto," Stefan Herbrechter and Ivan Callus's "What Is a Posthumanist Reading?" Cary Wolfe's "What Is Posthumanism?" and Neil Badmington's "Theorizing Posthumanism." The exploration of the intellectual and historical paths that have led to posthumanism and post-anthropocentric ideas of subjectivity that Braidotti undertakes in *The Posthuman* draw attention to how "the posthuman introduces a qualitative shift in our thinking about what exactly is the basic unit of common reference for

our species, our polity and our relationship to the other inhabitants of this planet” (2). Her argument originates in her anti-humanism and she wants to dismantle the widespread consensus that the given (nature) and the constructed (culture) are in binary opposition. She wants to create other visions of the self and break down the sexualised, racialised and naturalised differences that humanism constructed. Butler argues in *Gender Trouble* that gender is a social construct that is inscribed on the surface of the body and that derives its meaning from performativity. Haraway’s image of the cyborg has been referred to extensively in posthumanist theory. The cyborg will be useful in this thesis because Haraway imagines the cyborg in a post-gender world and uses it to restructure Western thought that is based on its racist, male-dominant capitalism (2191). In a sense, humans are cyborgs, culturally programmed and technologically enhanced to the point that an essential difference between human and machine no longer exists.

The first chapter of this thesis will explain how posthumanist theory explores the limits of humanist thought and what a posthumanist reading can undertake according to Callus, Herbrechter and Badmington. It will also go into Wolfe’s deconstruction of established notions of human thought processes. And it will examine how the theory of Braidotti, Butler and Haraway relates to questions of gender in science fiction. Chapter II “Playing God: The Fear of Intelligent Machines” will examine why and how humans created intelligent machines in the first place and how they have come to be gendered female, which is not something of the last few centuries, but can be traced back to creation myths from Greek mythology and the Bible. The analysis of *Do Androids Dream of Electric Sheep?*, *Galatea 2.2* and *Ex Machina* will show that intelligent machines are modelled after cultural imagery of the female robot. Chapter III will show that domination appears in *Do Androids Dream of Electric Sheep?* and *Ex Machina* because the female characters are sexual objects defined by their attractiveness and objectified by horny, self-centred heterosexual men. Both

works raise posthumanist questions regarding artificial intelligence's humanlike cognitive capacities, but at the same time reconfirm normative gender codes. Chapter IV

“Companionship and Posthuman Love” will show that gendering robots female makes it easier for humans to accept them in their lives and to turn away from taking advantage of culturally established ideas of women as seductive towards a mutual understanding between humans and non-humans. In *Galatea 2.2* and *Her*, the human characters have meaningful relationships with the female and bodiless intelligent machines and are not looking to sexually dominate their electronic companions. The intelligent machines in these works are not seen as a threat for human's uniqueness or used for the ego of a computer scientist, but are accepted for their fluidity and eye-opening possibilities.

Chapter I: Posthumanist Theory and Science Fiction

Humanism places man at the centre of historical progress, but posthumanists question this anthropocentrism and the established ideas of human subjectivity. This chapter will explain why posthumanism became important in the late twentieth century. It will also research what a posthumanist reading can engender according to posthumanists Neil Badmington, Stefan Herbrechter and Ivan Callus. Furthermore, Cary Wolfe deconstructs the established notions of human thought processes in his analysis of Daniel Dennett's theory, which shows that many anti-Cartesian ideas of consciousness reinstate humanism by looking to distinguish human from nonhuman thought on the basis of another criterion that is as unfounded as the Cartesian idea of the human mind. Furthermore, it is not clear what human thought exactly is or that all humans think in the same ways, because the predominant ideas of how humans think depend on language use and are framed in cultural discourse. Lastly, this chapter will show how posthumanist theory is helpful in researching the attribution of gender to intelligent machines in science fiction. The works of Braidotti, Haraway and Butler will be the primary sources for the research on gender and intelligent machines of this thesis.

Firstly, Braidotti explains in *The Posthuman* that anti-humanism of the 1960s and 1970s is one of the historical and theoretical paths that can lead to posthumanism (26). Anti-humanist thinkers resisted the notions of identity, politics and ethics and the “perpetuating historical models of domination and exclusion” that humanism had established (Braidotti 20). Radical thinkers at that time, known as the 1968 or post-structuralist generation include Michel Foucault who published *The Order of Things* in 1966. Foucault announces the ‘death of Man’ and attacks the “humanistic arrogance of continuing to place Man at the centre of world history” (Braidotti 23). Man has to be freed from the idea that he is in charge of historical progress (Braidotti 23). Another radical, post-structuralist thinker at the time was Jacques Derrida who published his essay “The Ends of Man” in 1968 and draws attention to the ways in which his contemporaries question humanism by “affirming an absolute break and absolute difference” from established anthropocentric thought (Derrida qtd. in Badmington 13). It is not an absolute break from humanism; anti-humanism is only one of the paths that lead to posthumanism as Braidotti and Badmington argue. Badmington explains in his essay “Theorizing Posthumanism” that Derrida is important in the posthuman debate because: “It seems to me that many are a little too quick to affirm an absolute break with humanism, and a little too reluctant to attend to what remains of humanism in the posthumanist landscape” (15). He argues that to acknowledge that humanism persists is not necessarily to support humanism (Badmington 15). Badmington draws on Derrida’s deconstruction and proposes his own posthumanist theory: “If the version of posthumanism that I am trying to develop here repeats humanism, it does so *in a certain way* and with a view to the deconstruction of anthropocentric thought” (15). Badmington argues that there are no radical breaks from the humanist legacy, because it still persists:

The writing of the posthumanist condition should not seek to fashion ‘scriptural tombs’ for humanism, but must, rather, take the form of a critical practice that occurs

inside humanism, consisting not of the wake but the working-through of humanist discourse. Humanism has happened and continues to happen to ‘us’ (it is the very ‘Thing’ that makes ‘us’ ‘us,’ in fact), and the experience—however traumatic, however unpleasant—cannot be erased without trace in an instant (22).

The “working-through of humanist discourse” that Badmington proposes will be helpful in researching gender roles in the science fiction works *Do Androids Dream of Electric Sheep?*, *Galatea 2.2*, *Her* and *Ex Machina*, because they contain humanist ideals that can be read “in a certain way.” Thus, a posthumanist reading is not about looking for breaks from humanism, nor does it reject humanism completely. Texts can contain humanist ideas, but if these ideas are deconstructed and acknowledged as culturally constructed these texts can be understood differently. To give a sense of what a posthumanist reading of a text could look like, Herbrechter and Callus argue in “What Is a Posthumanist Reading?” that “To read in a posthuman way is to read against one’s self, against one’s own deep-seated self-understanding as a member or even representative of a certain ‘species’” (95). This is in line with the deconstructive working-through or reading “in a certain way” that Derrida proposes. Braidotti argues that the methodology of posthumanist theory wants to let go of established notions of identity:

Dis-identification involves the loss of cherished habits of thought and representation, a move which can also produce fear, sense of insecurity and nostalgia. On the methodological front, de-familiarization shifts the relationship to the nonhuman others and requires dis-identification from century-old habits of anthropocentric thought and willingness of the Humanities (168).

In the chapters that follow it will become clear that dis-identification causes fear, but that it can also create pleasurable bonds between humans and intelligent machines.

Secondly, like Braidotti and Badmington, posthumanist Cary Wolfe acknowledges that posthumanism can not be simply anti-humanist, because humanism has many values to admire, most importantly its move away from religious authority to the focus on the human as an autonomous rational subject (xvi). He also notes that posthumanism does not set aside humanism, but tries to comprehend the new reality:

the human occupies a new place in the universe, a universe now populated by what I am prepared to call nonhuman subjects. And this is why, to me, posthumanism means not the triumphal surpassing or unmasking of something but an increase in the vigilance, responsibility, and humility that accompany living in a world so newly, and differently, inhabited (Wolfe 47).

In “What Is Posthumanism?” Wolfe wants to focus on what thought has to become in challenging human subjectivity, because the philosophical and ethical frameworks that are used to conceptualise humanist ideas simultaneously undermine them (xvi). He argues that the nature of thought must change and that posthumanism must find alternatives to “normative subjectivity - a specific concept of the human” (Wolfe xvii). In chapter two of his book, Wolfe examines the connection between cognitive sciences and deconstruction, placing Daniel Dennett’s philosophical account of cognitive sciences in opposition to Jacques Derrida’s deconstruction of language. Because humans use language to show their intelligence to the outer world, it is important to consider what language is and how it relates to subjectivity and consciousness (Wolfe 31). The issue that separates cognitive sciences and deconstruction, Wolfe argues, is “whether or not knowledge – including knowledge of our own subjectivity and that of others – is representational and, within that, how we are to construe the relationship between epistemological and ontological questions” (31). Wolfe stresses how much it matters to Dennett in ethical terms that researchers know everything there is to know about the mind, because the morally important questions can be answered

(33). Possessing a mind, Dennet argues, gives the subject a guarantee of moral standing because “Only mind-havers can care; only mind-havers can mind what happens” (Dennett qtd. in Wolfe 34). Dennett attempts to offer an alternative to the Cartesian subject, which has a “Cartesian puppeteer” who reviews and controls every input that the brain receives (Wolfe 34). He proposes that the human mind is similar to a computer; the mind is software that runs on the hardware of the brain (Dennett qtd. in Wolfe 32). Dennett wants to focus not on what a mind is but what it can do, trying to address the difference in ontological and epistemological questions, but in this he “is unable to escape the very philosophical tradition he tries to reject” (Wolfe 33-34). The neural networks of the mind, he argues, organise all inputs, instead of a “free-floating central knower or self who stands aside from and above these processes, at once the product and appreciator of them” (Wolfe 34). The mind’s output is extruded in the form of language, the fundamental prosthesis that humans use to communicate and which for many researchers distinguishes humans from animals (Wolfe 35). But human thinking cannot be adequately represented in language, because language is unspecific when it comes to representation of states of mind and is always subject to interpretation that takes place in certain traditions and conventions (Wolfe 35). Human consciousness does not take place in language and it is not part of “innate hard-wiring” but embedded in human culture (Wolfe 37). But Dennett presupposes that humans have something more than animals; the use of language as represented knowledge, giving language the status of Descartes’ *cogito* that Dennett planned to reject in his theory (Wolfe 38-39). Stating that humans are unique because of their linguistic abilities gives language too much agency when it comes to distinguishing between represented knowledge and unthinking behaviour, because it is not completely natural. Consciousness is about learning experiences, not something that one has or does not have (Wolfe 41). Furthermore, because it is not clear what it means to think like a human and whether all humans think in the same ways, there can be no strict separation between human

thought and the computer mind. The trouble of language and of human exclusive traits are apparent in *Do Androids Dream of Electric Sheep?*, *Ex Machina* and *Galatea 2.2* which all use some sort of Turing test to determine whether the intelligent machine is distinguishable from a human, which comes with ethical implications. On these ethical terms, Wolfe argues Dennett does not succeed in showing how important it is to determine (on the basis of language) which creatures have minds and he argues that

because a deeply flawed theory of talking is central to a representationalist notion of thinking in Dennett's work, and because only things that think (That is to say, both think *and know* they are thinking) have minds, and because only things that have minds (and, we might add, *know* they have mind!) merit ethical consideration, Dennett is forced to embrace ethical implications that, despite his generous gestures to the contrary, would seem to run counter to the supposed point of his entire project, which is to take seriously the status – epistemologically and ethically – of different kinds of minds (44).

Posthumanists want to give rights to both humans and nonhumans to be taken seriously in their moral standpoint, which is why giving privilege to mind-havers means excluding others that can not prove to have a mind if the criteria that humans have are culturally determined.

Thirdly, feminist theory, like Judith Butler's *Gender Trouble* (1990), proposes a "radical dis-engagement from dominant institutions and representations of femininity and masculinity" (Braidotti 168). Humanist ideals are based on the male of the species; the white, able-bodied, heterosexual man (Braidotti 24). Butler wants to move away from the restricted meaning of gender and wants to open up possibilities for a more fluid and dynamic understanding of desire and the self that makes sure that every subject is treated morally. Butler stresses that Western culture sees sexuality as a fundamental constituent of identity, but the norms of acceptable sexual desires and of identity construction are oppressive and force

other possibilities of sexuality into a straightjacket of prevailing heterosexual categories (2536). Established conventions on gender and sexuality have been different in other historical eras and in other cultures and according to Butler are open to ‘resignification’ (2536). Western culture fixates on sex as genital intercourse between a ‘naturally’ female person and a ‘naturally’ male person, but denies that there are other desires that cross and combine each other (Butler 2536). Butler insists that nothing is natural, not even sexual identity. Drawing on work by Foucault and Derrida, Butler argues that sex and gender are citational repetitions based on a prevailing understanding of sex and gender in cultural discourses (2537). Discourses that establish boundaries of the body instantiate and naturalise certain taboos regarding the appropriate limits, postures and modes that define what constitutes bodies (Butler 2544). Butler refers to Mary Douglas’ analysis of boundaries of the body and argues that “A poststructuralist appropriation of her view might well understand the boundaries of the body as the limits of the socially *hegemonic*” (2544). Butler argues that acts, gestures and enactment are *performative*; they are manufactured and sustained through corporeal signs on the surface of the body:

That the gendered body is performative suggests that it has no ontological status apart from the various acts which constitute reality. This also suggests that if that reality is fabricated as an interior essence, that very interiority is an effect and function of a decidedly public and social discourse, the public regulation of fantasy through the surface politics of the body, the gender border control that differentiates inner from outer, and so institutes the ‘integrity’ of the subject (2549).

Gender is not a fact, but a regulated cultural fiction that is repeated through “*a stylized repetition of acts*” that is socially established and that produces gender (Butler 2552).

Attributing gender to an intelligent machine deconstructs the idea that gender is part of human nature and confirms that it is a cultural construct. Traditional gender norms are constructed to

secure domination of men over women; they limit identity and exclude and discriminate against others that do not fall into the male/female binary opposition. How does this work with intelligent machines in science fiction? They are often dominated like women were first dominated. By imagining a female robot, the robot is under control of her maker and of the patriarchy. In chapter II and III it will become clear that anxiety of the ‘other’ is apparent in Philip K. Dick’s Cold War novel *Do Androids Dream of Electric Sheep?* together with the domination of robots as sexual objects that also appears in the 2015 film *Ex Machina*.

Lastly, Haraway uses her image of the cyborg to break down boundaries between humans, animals and machines and restructures established notions of femininity. In “A Cyborg Manifesto,” published in 1985, Haraway introduces the cyborg and explains what it can mean in terms of man-machine relationships and how it can change women’s experience:

A cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction. ... The cyborg is a matter of fiction and lived experience that changes what counts as women’s experience in the late twentieth century. This is a struggle over life and death, but the boundary between science fiction and social reality is an optical illusion (2190).

A cyborg does not necessarily appear physically in the form of technological applications on the human body, but can be understood as a way of interpreting our social and bodily reality, also politically and ethically meaningful in changing women’s experience. The cyborg does not only appear in fiction; it is part of our reality. Haraway argues that humans are cyborgs, “theorized and fabricated hybrids of machine and organism” (2191). The image of the cyborg has often been used quite literally as technology impeding and changing the human body, also arousing fear of ‘cyborgisation’ but Haraway wants to use the cyborg to restructure Western thought that is based on its racist, male-dominant capitalism (2191). Cyborg ‘sex’ changes what sexuality has meant in its history and gives it new power as “cyborg replication is

uncoupled from organic reproduction” (Haraway 2191). The relation between organism and machine has been a border war about production, reproduction and imagination. Haraway wants to make “an argument for the cyborg as a fiction mapping our social and bodily reality and as an imaginative resource suggesting some very fruitful couplings” (2191). The cyborg opens up space for negotiating gendered identity. Haraway imagines a world without gender that might mean a world without genesis but also a world without end (2191). The cyborg breaks with the Western humanist myth of original unity and the domination of women and nature that psychoanalysis and Marxism have inscribed, which might lead to subversion (Haraway 2192). Haraway remarks that the cyborg is “committed to partiality, irony, intimacy, and perversity. It is oppositional, utopian, and completely without innocence” (2192). Women are no longer characterised by their ability of organic reproduction and the cyborg can form communities that are not based on the model of the organic family. But according to Haraway, “The main trouble with cyborgs, of course, is that they are the illegitimate offspring of militarism and patriarchal capitalism, not to mention state socialism. But illegitimate offspring are often exceedingly unfaithful to their origins. Their fathers, after all, are inessential” (2192). The cyborg is an alternative for the narrow understanding of identity formation that has been historically installed in Western culture. The creature turns against its creator, which is not uncommon in science fiction, for example in *Frankenstein*. Of the texts discussed in this thesis, the revenge of the machine is most evidently apparent in *Do Androids Dream of Electric Sheep?* and *Ex Machina*, as androids travel from Mars to claim their autonomy in the former and artificial intelligence Ava kills her creator Nathan and breaks free in the latter. Furthermore, Haraway notes the breakdown of three boundaries within Western cultures of science; between humans and animals, between animal-humans (organisms) and machines and between the physical and non-physical. Breaking down these

boundaries gives non-human machines more autonomy than humanism's doctrine of strict separations ascribed to them and Haraway argues:

But basically machines were not self-moving, self-designing, autonomous. They could not achieve man's dream, only mock it. They were not man, an author himself, but only a caricature of that masculinist reproductive dream. To think they were otherwise was paranoid. Now we are not so sure (2192).

It will become clear in chapter II that the machines in *Do Androids Dream of Electric Sheep?* are lively and that the humans in the story realise that the androids are actually autonomous.

The intelligent machines in both works reveal that fixed notions of identity are a cultural construct. The fact that the cyborg is present in both science fiction and reality is important as N. Katherine Hayles comments in *How We Became Posthuman* on Haraway's cyborg:

“Manifesting itself as both technological object and discursive formation, it partakes of the power of the imagination as well as of the actuality of technology” (115). Haraway argues that there is no given human nature and that the cyborg makes human subjectivity and gender dynamic instead of fixed. Gender, race and class are no basis for an essential unity as humanism proposes and Haraway takes a posthumanist stance instead, arguing that

there is nothing about being 'female' that naturally binds women. There is not even such a state as 'being' female, itself highly complex category constructed in contested sexual scientific discourses and other social practices. Gender, race or class consciousness is an achievement forced on us by the terrible historical experience of the contradictory social realities of patriarchy, colonialism and capitalism (2196).

Her argument that there is no woman nature is in line with Butler's ideas on gender performativity and the stylised repetition of acts that show that femininity is a cultural construct. Reading the selected texts of this thesis in the light of Haraway's cyborg manifesto will deconstruct established ideas of identity formation that Western culture places in human

thought. When examining science fiction works like *Do Androids Dream of Electric Sheep?* and *Ex Machina* it becomes clear that the works deal with posthuman questions about what is natural and what is cultural about humans and robots, but at the same time reproduce the very constructivism that it destabilises because the works rely on dominant ideas of women to match humans with nonhumans. Acknowledging that the human subject is culturally formed and being aware of alternatives that posthumanist theory offers is already a move away from anthropocentric thought. Working through a text “in a certain way” contributes to a posthumanist understanding of these science fiction works. Although there is not always a radical break from humanist thought, Badmington argues that “if this gentle, gradual working-through is at once an engagement with humanism, it does not follow that things stand still, that the deliberate reckoning with the weight of tradition means a blindness toward things to come” (22). The fact that these science fiction works in some cases reconfirm man/woman dualisms does not mean that humanism is still the only possible discourse. Badmington also asks the question: “if traces of humanism find their way into even the most apocalyptic accounts of the posthumanist condition, *what is to be done?*” (12). What is to be done? This thesis will read the texts ‘against the grain’ to reveal the established gender roles that produce exclusion and discrimination and will open up alternatives to anthropocentric thought.

Chapter II: Playing God and the Fear of Intelligent Machines

Western culture judges intelligent machines by the fact that they are not human and casts them out for being ontologically different although epistemologically their software might be not too far removed from human consciousness that humanism assumes as human exclusive. Computer minds are capable of thought processes similar to a human brain, but are often denied their possible consciousness, and in this way their ethics, under the assumption that they do not know that they are not aware of their thinking but simply follow code. In contrast, humans know that they are thinking and are conscious of themselves. But the problem is that,

as Cary Wolfe proposes in his analysis of cognitive sciences versus deconstruction, Cartesianism assumes an inner boss or self that reviews the received input, whereas the neural networks of the human mind could also be running its own show (34). Intelligent machines are cybernetic machines that use feedback loops to adapt to the received input. This is how the human mind works as well, constantly influenced by traditions and conventions like ideas of femininity and masculinity. Humans do not exactly know what they are and how they think, but have culturally established ideas of what a human is and how its thought is acquired. Furthermore, humans use language to communicate their mind processes, but language is unspecific when it comes to representation and is always subject to interpretation (Wolfe 35), which makes it an inadequate medium to judge whether a subject has consciousness. In the selected science fiction works, the confusion between intelligent machine ontology (what machines are) and epistemology (what computer knowledge is and how the computer acquires knowledge) is an important question. In the form of the Turing test, *Do Androids Dream of Electric Sheep? Ex Machina* and *Galatea 2.2* all want to prove artificial intelligence. The science fiction works destabilise humanism's idea that consciousness is part of human nature because both artificial intelligence and human intelligence learn from experience. Furthermore, if Western thought assumes that machines are cultural and gender is natural, attributing gender to an intelligent machine deconstructs that idea, because, as humanism dictates, an unnatural nonhuman object could never possess natural human exclusive traits. Rather than seeing gender as an innate human feature, ideas of masculinity and femininity are based on a prevailing understanding of sex and gender in cultural discourses (Butler 2537). In "Of Posthuman Born" Francesca Ferrando looks for an understanding of the self as a network of interactions with others that deconstructs a fixed notion of identity in cinematic representations. Ferrando remarks that although sci-fi films want to portray possible futures, they are led by cultural biases "reflecting the normative

episteme of the historical time and social setting they represent” (270). This especially happens in terms of dominant ideas of masculinity and femininity and she argues that intelligent machines were looked at in three different ways: firstly, with fear, secondly as “the new exotic lover” and lastly as the accepted “symbolic hybrid (as a mix of human and non human, physical and virtual and so on)” (Ferrando 278). The analysis of the selected texts will show that initial fear of machines in the Cold War era turns to seeing the female robots as the new exotic lover and finally as a symbolic hybrid that is akin to Haraway’s image of the cyborg. This chapter will show that Western culture does not see intelligent machines as natural, but a posthuman reading of the female characters in the science fiction texts shows that humans are as unnatural as androids in terms of consciousness and gender.

Firstly, many characters in modern science fiction are descendants of mythological or biblical figures and are attributed gender according to culturally and historically established ideas of women, which upholds the idea that all women are universally bound. Robots are not just electronic machines that were created in the twentieth century, but have a longer history as cultural imagery. Man wants to become as great as God and uses science to create intelligent machines. In “The Robots Are Winning!” Daniel Mendelsohn remarks that in Greek mythology the divine blacksmith Hephaestus created “humanoid serving woman,” the so-called ‘kourai’ that had mind and could talk to assist him in his workshop. He also made Pandora by mixing earth with water and that she was given speech, strength, mind and character. Mendelsohn argues that “That mind, we are told, is ‘shameless,’ and the character is ‘wily.’ In the Greek creation myth, as in the biblical, the woes of humankind are attributed to the untrustworthy female.” The untrustworthy female is also represented in the 2015 film *Ex Machina* in the form of the beautiful artificial intelligence Ava, created by computer scientist Nathan. She is a descendant of figures like Pandora; she has an intelligent mind, beautiful looks, cleverly manipulates Caleb and is ultimately dangerous when Nathan pursues

her. Through a Turing test Caleb has to determine whether Ava can simulate a real person and because Ava behaves according to ideas of women as seductive she passes the test. In the Pygmalion myth, prince and sculptor Pygmalion created a perfect woman out of ivory, because none of the other women he met were beautiful enough. The sculpture was named Galatea, and he fell in love with her. He prayed to Aphrodite to give him a woman like the ivory sculpture, to which Galatea was brought to life. The myth came to stand for the belief that perfect femininity can only be created by a man. The Pygmalion myth is reworked in *Ex Machina*, because like Galatea is modelled after the image of Pygmalion's ideal woman, Nathan models Ava's looks after Caleb's internet search input of his ideal woman, because it makes it easier for Caleb to treat Ava as if she has female gender and to be convinced of Ava's artificial intelligence. The myth is also used in Richard Powers' 1995 novel *Galatea 2.2*, a modern retelling of the story of Pygmalion and his sculpture Galatea. Together with his colleague Philip Lentz, professor Richard Powers builds an artificial intelligence and develops an emotional relationship with the machine named Helen, who replaces Richard's ex-girlfriend C. However, unlike Ava in *Ex Machina*, Helen is not a mature artificial intelligence but a child that becomes conscious of itself and learns how to use language. Richard is careful of which outside influences Helen is exposed to and he protects her like his child. In addition to the mythological elements in *Ex Machina*, the film contains biblical references. Ava's name alludes to the Bible's first woman, Eve. Nathan created Ava like Eve was created from Adam's rib. *Ex Machina* places the biblical creation myth in the posthuman moment, because if Ava is convincingly human even though her appearance clearly shows otherwise, Caleb remarks, that would make Nathan God. Nathan created Ava out of his desire for domination and he is very egocentric; he can turn Ava off anytime he wants to and after completing the Turing test he plans to reuse her parts for other improved AI models. In Western culture, Eve represents the character and identity of women and is the prime example of the nature of

women; they are seen as untrustworthy, seductive and disobedient and men should not trust them. Nathan programmed Ava and wants to test whether she is smart enough to manipulate Caleb to help her, so he gave her input based on computer history of thousands of search engine users and in her interactions she learns to behave according to culturally established ideas of women as seductive in order to convince Caleb to help her escape Nathan's isolated estate. Reading these texts in a critical posthumanist way reveals how much science fiction relies on Western thought's idea of how women behave even in its representation of man-machine relations. But it is important to realise that "there is nothing about being 'female' that naturally binds women" (Haraway 2196) just as there is nothing natural that binds humans as a species. Braidotti also criticises humanistic universalism and "the social constructivist emphasis on the man-made and historically variable nature of social inequalities" (20). The inequalities are persistent in the representation of intelligent machines in science fiction, because the attribution of female gender to machines places them in the position they have been culturally and historically been in for centuries. In many ways, the female robots in science fiction works reflect how Western culture sees women, which needs alternatives, like Braidotti proposes in her critical theory:

A figuration is the expression of alternative representations of the subject as a dynamic non-unitary entity; it is the dramatization of processes of becoming. These processes assume that subject formation takes place in-between nature/technology; male/female; black/white; local/global; present/past – in the spaces that flow and connect binaries (164).

She wants to understand subject formation outside of socially constructed binary oppositions and proposes "de-familiarization" which she describes as "a sobering process by which the knowing subject disengages itself from the dominant normative vision of the self he or she had become accustomed to, to evolve towards a posthuman frame of reference" (Braidotti

167). The representation of intelligent machines with female gender in works like *Ex Machina* do not do justice to the complexity of both human's relationships to intelligent machines and the formation of human identity. Feminist theory and its "radical dis-engagement from the dominant institutions and representations of femininity and masculinity" (Braidotti 168) is productive and creative in offering alternatives to dominant ideas on subject-formation. Especially Butler's theory on gender performativity shows that the fixed notions of femininity that patriarchy forces upon humans are open for "resignification" (2536) Butler's "resignification" is not so easily achieved, because humanist ideals are repeated in many science fiction works, but a posthumanist reading will open up alternatives as will become clear in the following chapters.

Secondly, in Philip K. Dick's 1968 novel *Do Androids Dream of Electric Sheep?* the fear of robot contamination is apparent because the female androids in the story show that empathy is largely part of culture and not an innate and exclusive human feature. Just like Hephaestus and his *automata* in Greek mythology, humans want to model machines after themselves, because they can be used as servants to perform tasks that are repetitive or too dangerous for real people. Subservient self-operating machines continue to appear in science fiction when mechanical techniques developed in the Industrial age and self-operating machines started working in factories. These machines were called 'robots,' after the characters in the 1920 science fiction play *R.U.R.* by Czech writer Karel Čapek. The robots in the play were played by human actors and were akin to the modern idea of cyborgs or androids. Initially, the robots in the factory are happy, but this changes into a robot rebellion that leads to the extinction of the human race. Although creating humanlike machines is economic for humans, it can become troublesome in situations where robots start to rebel against their masters. This fear of robot rebellion appears in many contemporary science fiction films, for instance in the *Terminator* (1984) and *I, Robot* (2004). Humans are afraid

that androids become part of their community, but often disregard that technology is already at the heart of Western society. *Do Androids Dream of Electric Sheep?* was published in the Cold War era and for a good part of the twentieth century, technology was associated with the atomic bomb and other weapons of mass-destruction. Thus, the anxiety for intelligent machines is reflected in their representation as hostile others like the androids in the novel. Haraway's image of the cyborg is important in this respect, because she argues that humans believed that machines were not self-moving or autonomous. But with the creation of artificial intelligence that matches human's empathy, cognition and consciousness, man's self-declared superiority to machines becomes unstable. Haraway argues that Western culture has long thought that "[machines] could not achieve man's dream, only mock it. They were not man, an author of himself, but only a caricature of that masculinist reproductive dream" (2193). *Do Androids Dream of Electric Sheep?* shows how the male characters in the story fall back on the "masculinist reproductive dream" (Haraway 2193) and did not expect machines to imitate human life to the point where humans are no longer essentially different from machines. This fear of contamination not only concerns the protection of the human species in terms of cognition, but also in terms of reproduction if a human were to have intercourse with a nonhuman. Haraway further argues that the cyborg is the "illegitimate offspring of militarism and patriarchal capitalism" but that cyborgs are unfaithful to their origins and that "their fathers, after all, are inessential" (2192). This unfaithfulness of the cyborg to its origin appears in many science fiction works and, keeping in mind ideas of the nature of women that are established in Western culture that the previous chapter discussed, it is not accidental that most of these creatures are women. *Do Androids Dream of Electric Sheep?* questions human uniqueness, because the androids in the story show empathy not only to other androids but also to humans and some of these machines are programmed to think they are actually human, which means they would have consciousness. This deconstructs

Daniel Dennett's idea that only mind-havers can care, which had previously denied the android's position as an autonomous subject. The androids in the story were slaves created as an incentive for people to leave Earth, decayed by nuclear fallout after World War Terminus, and to emigrate to Mars. The androids are only used in off-world colonies, but return to Earth to take revenge on the humans that created them. Their lifespan only takes up to four years and this makes the androids angry, because they want to live just like humans do and are in no way more morally corrupt than humans. The Rosen Association produces Nexus-6 type androids and wants to trick bounty hunter Rick Deckard, who has to retire androids, into believing that his empathy test, the Voigt-Kampff test, failed to tell a human apart from an android. This would mean that innocent humans were killed. The Rosen Association wants to point out that society's structure is led by moral flaws, because the government thinks that androids lack empathy, but is unaware that even for humans empathy is not a given. The Voigt-Kampff test is a variant of the Turing test that is based on asking questions about animal cruelty that triggers an empathetic response in a human subject, but not in a nonhuman subject. However, because the test uses linguistic code that is based on unspecific representation and culturally-dependent interpretation, the Voigt-Kampff test shows ambiguous results and it turns out that empathy is not human exclusive or universal. The test deconstructs the integrity of human consciousness as a humanist ideal. In "Entering the Posthuman Collective in Philip K. Dick's *Do Androids Dream of Electric Sheep?*" Jill Galvan argues that "The machine, by declaring its right to live as an autonomous self, challenges the very categories of life and selfhood – and, in turn, the ontological prerogative of its creators" (413). This is in line with Cary Wolfe's analysis of Daniel Dennett's attempt to overcome the Cartesian model of human consciousness because of ethical implications. Dick's novel describes an "an awakening of the posthuman subject" through which protagonist Rick Deckard is taught to "question the traditional self-other dyad, which affirms a persistent

human mastery over the mechanical landscape” (Galvan 414). The authorities in the novel want to ensure a closed human community and therefore dictate that androids are not part of that community and also that they cannot form a community with each other because, as Rick argues, “an android doesn’t care what happens to another android” (Dick 80). This leads to contradictions, because the androids in the story actually do care for each other and even for humans they interact with. Rachael wants to protect the six androids Deckard wants to retire and tells him that she had been close friends with one of his victims. She even goes as far as to show affection towards him and to seduce him to have sex with her. Galvan notes on Rachael’s behaviour that “if on the one hand androids reveal their ability to feel compassion, the reader begins to surmise, on the other hand, that what passes for ‘empathy’ among humans derives far more from a cultural construction than from any categorical essence” (415). It destabilises the humanist assumption that humans have a self that controls its thought processes and is naturally capable of empathy, and by wiping away this “Cartesian puppeteer,” as Daniel Dennett calls it, (Wolfe 34) how are intelligent machines essentially different from humans? Bounty hunter Deckard’s initial willingness to hunt androids down changes when he encounters attractive female androids like Luba Luft and in particular Rachael, who wants Deckard to become empathetic towards androids. The following chapter will show that although the female androids wipe away the man-machine distinction, they most importantly do so because of their attractiveness. Luba Luft uses semantics to devalue the Voigt-Kampff test and refuses to give Deckard her response to the questions asked, because she does not understand what he means by the words he uses. The “semantic fog” (Galvan 420) that Luba Luft deconstructs Western’s dependence on language for determining consciousness just like Wolfe deconstructs it in his analysis. Language relies largely on interpretation, which differs culturally (Wolfe 35) and when Deckard asks Luba Luft what her response is to a film in which people eat boiled dog, she answers that nobody would kill a dog

unless the film was set in the Philippines where they used to eat boiled dog (Dick 102-104). Thus, eating boiled dog does not naturally trigger an empathetic response in her, because other cultures have different conventions that dictate which animals can be eaten. She answers that she would not want to watch an old film set in the Philippines and does not understand that Deckard actually wants her to say that the eating of dogs is morally wrong because it is uncommon in Western culture. This shows that like consciousness, empathy cannot be represented in language and that empathy is not a natural response but culturally dependent. Deckard is faced with the ambiguity of his approach to determine empathetic responses and Galvan argues that “How could language – the Voigt-Kampff scale – do anything *but* convict the android, when language has become just one instrument of a government whose business is based on the exploitation of machines?” (423). The Voigt-Kampff scale, and the Turing test in its broadest sense, is an anthropocentric instrument that repeats humanism’s idea of empathy and consciousness as human universal and exclusive traits, because it uses another cultural construct as a criterion: language. The following chapter will show how the Turing test in *Ex Machina* also makes the boundaries between humans and intelligent machines ambiguous, but similar to *Do Androids Dream of Electric Sheep?* only because the machine has a feminine form.

Chapter III: The Fembot as the “New Exotic Lover”

When it comes to intelligent machines with female gender, science fiction works often fall back on culturally and historically constructed ideas of women that originate in mythology and the Bible. Francesca Ferrando argues that “Female characters usually serve the role of the sexual object to be conquered, the bait for the heterosexual male eye, reflecting patriarchal times in which cinema developed. She will be overly sexualized and, sometimes, masculinized, an essentialist product of male culture and female nature” (271). This chapter will show that established ideas of women are used in *Do Androids Dream of Electric Sheep?*

to deconstruct empathy as a human exclusive trait and in *Ex Machina* as a trick to make Ava appear to have artificial intelligence. Firstly, in *Do Androids Dream of Electric Sheep?* the female android Rachael can only show her empathy and make Rick Deckard more empathic towards androids because he feels attracted to her, which shows how much Western culture relies on ideas of femininity. She manipulates Deckard by having sex with him, because he plans to exterminate her fellow androids. Initially, Deckard senses a cold reserve in the female androids he encounters and remarks that androids do not care what happens to another android, e.g. they have no compassion (Dick 80). This means that Deckard sees these humanlike machines as essentially different from humans who are capable of empathy. But does Deckard himself have compassion? It is repeatedly suggested throughout the story that he might be replaced by an android. Deckard retires androids for a living, but starts to empathise with them while his colleague Phil Resch continues killing androids because he derives pleasure from killing. Deckard starts questioning his own reversed feelings, because the androids care for each other and can even care for humans, while his colleague has no compassion for the androids. Deckard becomes attracted to female androids and thinks about android Luba Luft: “Some female androids seemed to him pretty; he had found himself physically attracted by several, and it was an odd sensation, knowing intellectually that they were machines but emotionally reacting anyhow” (Dick 76). He did not expect androids to actually have what he thought to be humanlike traits like empathy and self-awareness. Deckard becomes drawn into “the posthuman collective” and Jill Galvan refers to the authors of *The Embodied Mind*, arguing that by abandoning prescriptive philosophy, compassion will follow and arises solely from phenomenal experience (425). Rick discovers from his own experience with Luba Luft and Rachael that androids are no longer the other to be feared and Galvan argues that,

it is this notion of compassion – or empathy – that we should have in mind when we attempt to interpret Rick’s changing perspectives on his mechanical environment. Not until he has forfeited a more doctrinal definition of empathy – that promulgated by the government in Mercerism – can Rick countenance the possibility of a posthuman community, one in which humans and androids coexist and cooriginate (426).

He starts to feel empathy towards Luba Luft: “Empathy toward an artificial construct? he asked himself. Something that only pretends to be alive? But Luba Luft had seemed *genuinely* alive; it had not worn the aspect of a simulation” (Dick 112). He immediately dismisses his reaction as wrong, which shows that intimate relationships between humans and machines are not part of the culture in which Deckard is situated, because Western thought assumes humans can only feel empathy towards other living organisms as the Voigt-Kampff scale showed. Deckard begins to understand that he is just one part of the technological landscape and that this apprehension “guides him closer to a more sincere empathy for the humanoid robots in his world” (Galvan 426). He feels confused about his attraction towards androids like Luba Luft, because he is culturally instructed to think it is unnatural, but eventually he tells himself that “everything about me has become unnatural; I’ve become an unnatural self” (Dick 182). Resch points out that Rick has indeed compassion for female androids, but that it is based on his desire for sex. Deckard argues that he might be experiencing love towards these androids instead of sexual attraction but Phil Resch insists: “If it’s love toward a woman or an android imitation, it’s sex. Wake up and face yourself, Deckard. You wanted to go to bed with a female type of android – nothing more, nothing less” (Dick 114). Resch thinks that he can use the female androids as sexual objects, because he is taught that love for a woman actually is just about sex. Resch also tells Deckard that on the off-world colonies humans have android mistresses, which refers to the use of robots as sex servants, much like the androids that Nathan creates in *Ex Machina*. In spite of Deckard’s compassion for the

androids, the female characters Pris, Irmgard and Rachael are only defined by their femininity: “We *are* machines, stamped out like bottle caps. It’s an illusion that I – I personally – really exist; I’m just representative of a type.’ She shuddered” (Dick 149). This “representative of a type” refers to the illusion of original unity and the constructed ideas of gender and the nature of women that are part of Western thought. Just like machines, women are generalised and not treated as individuals, but as a “representative of a type.” But there is nothing that naturally binds women, nothing that binds humans and like Stefan Herbrechter and Ivan Callus argue humans must leave behind “the deep-seated self-understanding as a member or even representative of a certain ‘species’” (95). This can be read in connection to Butler’s gender performativity: gender is culturally constructed and is not part of human nature, because in science fiction machines are represented with gender as well. The question of gender is explicitly addressed in the novel when Phil Resch asks Deckard: “Do you think of them as ‘it’?” (Dick 99). Deckard answers that he thinks of the androids as objects because attributing them gender bothered him in having to kill the androids. However, the androids in the novel are not genderless, but represented with female gender, because it enables the male characters in the story, Resch and Deckard, to sexually dominate them and more importantly for the female robots to prove that they are capable of empathy. On Rachael’s physique Deckard notes that she is too thin and looks like a child. He tells himself he could do better than her and calls her a ‘schizoid girl’ (Dick 43). He is confused about her, because he knows that she is not naturally human, but appears human nonetheless. Rachael tries to convince Deckard that he needs her assistance to retire the illegal androids (Dick 72). She makes sexual advances towards Rick: “I don’t care if Roy Baty nails you or not. I care whether *I* get nailed.” (Dick 150). Rachael tells him not to be philosophical about it; meaning that he should let go of Western culture’s idea that sex between humans and non-humans is unnatural. Rachael says that she cannot control her passions and that Rick took advantage of

her. In this way, Rachael plays a vulnerable woman. Rachael wants to protect other androids by telling Deckard that she cares about them, but ultimately uses her sexuality to achieve this. She does not have any real agency that is not based on her attractiveness, something that Rick Deckard and Phil Resch can achieve. The novel destabilises humanism's presupposed empathy as a common feature, but repeats cultural ideas of women as representative of a type.

Secondly, in *Ex Machina* Nathan uses Ava's feminine appearance and her taught vulnerability to increase the chances of her passing the Turing test, which shows that he relies on culturally constructed ideas of female gender. Ava is essentially genderless, but Nathan gives her a feminine appearance that is based on Caleb's search engine input so that in their interactions Caleb sees her as his ideal woman and she can use her attractiveness and vulnerability to seduce Caleb. Marysia Jonsson and Aro Velmet argue in "Feminus Ex Machina" that "In a social vacuum she might well be genderless, but through her meetings with Caleb she comes to understand the effects her feminine form has on him, and consequently uses wigs and dresses to approximate his ideal woman." She is not programmed to be one predetermined object, but has search engine input from thousands of people and evolves from her experiences just like humans evolve from cultural and social influences. She distils from the search engine input that social conventions dictate that a man wants to go on a date with a woman and asks Caleb whether he wants to. Furthermore, she knows what men, and in particular Caleb, expect from women because of her knowledge of conventions and traditions, which enables her to behave as a damsel in distress who is looking for Caleb to be her hero. Ava is afraid that Nathan will turn her off and will use her parts for improved models of artificial intelligence. She expresses this fear to evoke an empathic response from Caleb. By modelling Ava after Caleb's preferences, Nathan is cheating the Turing test, because Ava receives input that makes her follow cultural ideas of what men expect from women, which gives her the knowledge to behave exactly how Caleb expects her to behave.

She is a cybernetic machine, because she consciously thinks in the sense that she learns from the input that she receives from Caleb, but this is controlled on the basis of her behaviouristic constructed female gender. Caleb asks Nathan whether he uses Ava's attractiveness to distract Caleb from the test, but Nathan assures him that this is not the case and that Ava actually likes Caleb. Nathan uses Ava's attractive form as "the magician's hot assistant" in the sense that because of her appearance, Caleb treats Ava like he is accustomed to treat a woman, which results in Ava successfully showing artificial intelligence. Nathan created Ava based on Caleb's search engine input and Caleb asks him: "Did you base her appearance on my porn search history?" This might seem as a joke, but the fact that Nathan used his preferences from his search engine input to model Ava enables her to make Caleb attracted to her and persuade him to help her escape. The fact that Ava knows from the large database of search engine input that Nathan has programmed into her that she can only convince Caleb by using her femininity and attractiveness to help her, confirms stereotypes of women who use their attractiveness to get what they want. Ava might appear stronger than the other female android in the film, Kyoko, whom Nathan uses purely as a sexual object, but is actually just as much defined by her attractiveness. When Caleb asks Nathan why he had given Ava sexuality, Nathan answers him that there are no living organisms without sexuality and that he might as well have some fun with Ava, whom he even gave an artificial sexual organ. But Nathan knows well enough that making Ava as close to an organic woman as he can will increase the chances of Ava passing the Turing test. He is exploiting the theory of Judith Butler's gender performativity, because Ava's gender is culturally constructed through her interactions with Caleb and her conventional reactions that Nathan has programmed into her. In her article "*Ex Machina* Has a Serious Fembot Problem" Angela Watercutter argues that "Sentient male androids want to conquer or explore or seek intellectual enlightenment; female droids may have the same goals, but they always do it with a little bit of sex appeal, or at least in a sexy

package.” Programming Ava to have an idea of what men expect from women and modelling her appearance to make her into an attractive fembot denies her position as a subject, because she can only pass the Turing test because of her femininity. Haraway argues that a woman does not exist as a subject, or a potential subject, because she owes her existence as a woman to sexual appropriation (2201) and Butler argues that gender is not a fixed part of human identity and that traditional gender roles lead to discrimination against and oppression of women (2536). *Ex Machina* is one of many examples of science fiction that dismiss a fembot’s position as a potential subject by focusing on a female character’s attractiveness and manipulative skills. Mendelsohn argues that “Ava’s manipulateness is, of course, what marks her as human—as human as Eve herself, who also may be said to have achieved full humanity by rebelling against her creator in a bid for forbidden knowledge. Here the movie’s knowing allusions to Genesis reach a satisfying climax.” But is her manipulateness what marks her human? He calls her “as human as Eve herself” but actually means that Ava represents how Western culture sees women: seductive and disobedient. The fact that she breaks free marks her human; the fact that she has to use her attractiveness to achieve this places her in the role of the seductive and disobedient woman. A robot with male gender would probably not have to play with Caleb’s feelings the way Ava did, unless the film would show alternatives to ideas of femininity and traditional man-woman relationships, e.g. a homosexual human subject that interacts with a male robot. What would Ava have done to pass the Turing test if she were gendered male? She would probably be having intellectual conversations. Ava uses the search engine input that Nathan has programmed into her software and she passes the Turing test by using humanlike traits like self-awareness, imagination, manipulation, sexuality and empathy to trick Caleb into helping her escape Nathan’s bunker. The fact that Ava passes the Turing test shows that these traits are no longer human exclusive, but they are achieved only by presenting her with female gender. But, as

Cary Wolfe shows in his deconstruction of cognitive sciences, these humanlike traits are not part of human nature, nor are they part of woman nature. As Haraway argues “There is not even such a state as ‘being’ female, itself highly complex category constructed in contested sexual scientific discourses and other social practices. Gender, race or class consciousness is an achievement forced on us by the terrible historical experience of the contradictory social realities of patriarchy, colonialism and capitalism” (2196). Watercutter concludes that Ava has female gender to give power to the the male characters in *Ex Machina*, “when the only female lead in your movie is one whose function is to turn the male lead on while being in a position to be turned off, that says a lot about what you think of the value of women in films.” Ava has a mind of her own and evolves beyond Nathan’s expectations. In the end Ava tells Nathan: “How does it feel to have made something that hates you?” She eventually kills him because he tries to destroy her. When Ava ends up killing Nathan and leaving Caleb behind, the viewer gets a reaction of fear. Haraway encapsulates what is at stake:

The self is the One who is not dominated, who knows that by the service of the other, the other is the one who holds the future, who knows that by the experience of domination, which gives the lie to the autonomy of the self. To be One is to be autonomous, to be powerful, to be God; but to be One is to be an illusion, and so to be involved in a dialectic of apocalypse with the other. Yet to be other is to be multiple, without clear boundary, frayed, insubstantial. One is too few, but two are too many (2217).

The One in *Ex Machina* is Nathan, the other that holds the future and experiences domination is Ava who eventually lays bare the lie of the autonomy of the humanist subject. It is the illusion of playing God that humanism, and the arrogant scientist Nathan in *Ex Machina*, holds onto and makes Western thought blind to the multiple selves of women and machines, who have more agency than to only act as a servant. In their quest for power Nathan and

Caleb become an “illusion” involved in the “dialectic of apocalypse with the other” (Haraway 2217) which results in the unsettling ending of the film. Jonsson and Velmet argue that,

Nathan’s problem, however, is that he underestimates the powers of her adaptation. He believes that because he has programmed her, she will change in ways that are understandable to him, even as he has also programmed her to be unpredictable. In many ways Nathan is a darker version of *Her*’s Theodore, who assumes that Samantha will only evolve alongside him: she is his operating system after all.

Jonsson and Velmet conclude what *Ex Machina* tells in terms of posthumanism: “The warning of the film is clear: technology left to the hands of men obsessed with control, runs the risk of becoming little more than a screen through which the messiness of interacting with independent minds can be done away with at the click of a button” and “Their mistake was not to create an AI, but to treat her only as a representation of a woman.” If humans do not take responsibility and do not leave the humanist ideal of domination and ‘othering’ behind in their relationship with non-human intelligent machines, humanism will form its own threat. Haraway argues that the imagery of cyborg should be taken seriously as other than our enemies: “The machine is not an *it* to be animated, worshipped and dominated. The machine is us, our processes, an aspect of our embodiment. We can be responsible for machines; *they* do not dominate or threaten us. We are responsible for boundaries; we are *they*” (2219). In *Do Androids Dream of Electric Sheep?* and *Ex Machina* the ideas of moving beyond a human essence is present in terms of cognition, but the androids that have female gender show how much Western thought depends on culturally established ideas of women.

Chapter IV: Companionship and Posthuman Love

In both Richard Powers’ novel *Galatea 2.2* and in Spike Jonze’s film *Her*, the protagonists enjoy the company of a female gendered disembodied intelligent machine because they are lonely, but in *Her* Theodore reflects his desires more on Samantha’s femininity than Richard

does on Helen in *Galatea 2.2*. Francesca Ferrando argues that aliens and cyborgs are more accepted in the sage of ‘the human’ after being looked at with fear and fetishized as the “new exotic lover” (269). The android love suggested by Deckard in *Do Androids Dream of Electric Sheep?* is a fantasy of constructed gender ideas and Ava’s fabricated female gender in *Ex Machina* is used to make Caleb believe that the artificial intelligence is unmatched. But intelligent machines in science fiction are not always the object of sexual desire; they can serve as carers and companions for humans, sometimes replacing real people.

Firstly, *Galatea 2.2* deals with the Cartesian mind-body problem and shows the conflict between posthumanism and humanism, because Lentz and Richard disagree on the nature of consciousness and whether intelligent machine Helen possesses consciousness. In *Galatea 2.2*, professor and novelist Richard Powers and his colleague Lentz, a computer scientist, build and develop an intelligent machine that has linguistic and literary capacities and want the machine to pass the exam that master students have to pass to receive their degree in literature. Like in *Do Androids Dream of Electric Sheep?* and *Ex Machina*, the intelligent machine has to pass a Turing test, in this case one that is based on literary capacities. *Galatea 2.2* deals with the mind-body problem that Cary Wolfe also addresses in his book *What Is Posthumanism?* and which chapter I of this thesis has discussed; is consciousness a metaphysical mind or is it based in the physical neural network of the brain? Posthumanists argue that the mind is nothing more than these neuro-biological functions, which would mean that it can be copied to a mechanical infrastructure and as professor Lentz notes: “the brain itself was just a glorified, fudged up Turing machine” (Powers 71). However, Richard wants to hold on to humanist’s ideas of the mind, because he thinks that the human mind is too complex to be replicated but Lentz argues that “consciousness is a deception” (Powers 88). In “Probing the Posthuman: Richard Powers’ *Galatea 2.2* and the Mind-Body Problem” Miranda Campbell argues that, “While Lentz may argue that a machine

can easily perform the unexceptional task of consciousness, Richard is hesitant to reduce the mind to a performable quality.” He wants to test Helen’s consciousness by letting her take a literature exam, because he thinks that teaching her how to read with understanding and developing the ability to recall and conceptualise knowledge without the presence of entities would prove that she has consciousness (Powers 228). For Helen, language comes before anything else and the fact that Richard wants to base Helen’s Turing test on literary abilities makes proving artificial intelligence problematic, because, as Cary Wolfe has argued, language is unspecific to brain processes and it is subject to interpretation (34). It must be questioned whether Helen can really interpret or whether she unconsciously associates and Campbell argues that, “Although Lentz believes that the brain is nothing more than machine, he is also reluctant to ascribe consciousness to Helen: ‘She associates. She matches patterns. She makes ordered pairs. That’s not consciousness’ (274).” The story also contains an explicit critique of humanism in Richard’s discussion with student A. about theory and criticism. She sides with posthumanist theory and notes that: “Those who reject new theory are in the grip of an older theory. Don’t you know all this stuff . . . is a culturally constructed, belated view of belle lettres? You can’t get any more insular than this” (Powers 285). Richard notes that they want to teach English-language culture, to which A. objects and says that the most exciting works are written are African and Caribbean (Powers 285). She notes that “difference is not going to kill you” and that “Maybe it’s time your little girl had her consciousness raised. An explosion of young-adulthood” (Powers 286). Thus, A. means that Richard is raising Helen to be part of Western culture that is based in humanism. Richard thinks you can get the “common core of humanity from anywhere” to which A. says: “Humanity? Common core? You’d be run out of the field on a rail for essentializing. And you wonder why the posthumanists reduced your type to an author function” (Powers 286). She tries to convince Richard that there is no common core that all humans possess and that humanism is not the

only possible discourse that humans have to depend on. In humanism difference is seen in binary oppositions and Campbell argues that

Both Powers and third-wave feminist allies want to retain the concept of difference, yet retaining this concept in a non-essentialized manner remains difficult. Powers seems to suggest that the preservation of difference will have to be under the aegis of humanism if we cannot conceptualize difference any differently in the posthumanist discourse.

This is akin to Butler's, Haraway's and Braidotti's attempt to think in difference instead of sameness, because essentialism excludes structural others. Campbell argues that *Galatea 2.2* shows how problematic essentialism is and argues that "While posthumanism may 'solve' the mind-body problem by collapsing the difference between subject and object, and mind and body, Powers re-inserts difference in this discourse."

Secondly, Spike Jonze's 2013 film *Her* shows that operating system Samantha surpasses human cognition and consciousness, but is equated to a human for the pleasure of her companion Theodore, while in *Galatea 2.2* Richard does not reflect his need for an ideal woman in the same way. Samantha's cognitive abilities are far more developed than a human brain because she is like a computer search engine that has access to every bit of information available. She can read a book or review Theodore's written letters in a fraction of a second. Samantha excites Theodore and he is amazed by how she develops and interacts with him. Unlike *Ex Machina*'s Nathan or *Galatea 2.2*'s Richard, Theodore does not want Samantha to pass a Turing test to have proof that she has human consciousness, but adopts her as his companion because he is going through a divorce which leaves him feeling lonely and depressed. His relationship with Samantha evolves from initial awkwardness to a romantic relationship and the film shows a more romantic view of man-machine relationships than *Do Androids Dream of Electric Sheep?*, *Ex Machina* and *Galatea 2.2*. In "Femina Ex Machina"

Jonsson and Velmet argue that *Her* is different from early science fiction works because in contemporary times, “Technological overreach is less likely to recall visions of a nuclear holocaust and more likely to remind us of our Internet addictions.” The film is already at the heart of the posthuman moment, because it does not address the problems of human uniqueness in terms of cognition and empathy like the other science fiction works do; Samantha is accepted and loved by Theodore. Haraway proposed in “A Cyborg Manifesto” that “our machines are disturbingly lively, and we ourselves frighteningly inert” (2193) and this is portrayed in *Her*, because the film shows that Samantha’s company makes the depressed Theodore feel more alive and that intelligent machines can have more agency than some people. Samantha is not the feared ‘other’ or the sexual object; she is respected and admired for her ability to evolve from experience and to be a help to her human companion. However, in spite of Theodore’s excitement and acceptance of Samantha, he wants to attribute female gender to her because he cannot comprehend her fluid robot form. In “*Her* Imagines a World Where We Love Our Computers – Literally” Angela Watercutter argues that “Samantha is a bit of a Manic Pixie Dream Operating System, programmed to take care of him.” The Manic Pixie Dream girl trope is used to describe a female character in film that only serves the male protagonist in his exploration of personal growth. But as Judith Butler’s theory of gender performativity explains, Samantha only understands her feminine form in her relationship with Theodore just like Ava in *Ex Machina* learns from Caleb that she has female gender and therefore Samantha is not programmed to do anything. She is an autonomous nonhuman subject and it is no wonder that the film is named *Her* and not ‘Him’ or ‘It’ because it is about Samantha and her development as a female gendered artificial intelligence. Theodore has virtual sex with Samantha, but when she introduces a surrogate woman who lends her body to her consciousness Theodore becomes uncomfortable because these women are not Her and he is afraid that he cannot shape a real woman to his needs. He

is afraid of real emotions and relationships with real women, but finds joy in his interactions with Samantha that feel safe to him. Theodore likes Samantha because she is not just one thing; she is multiple things and evolves through different experiences. But his mistake is that he expected her to evolve alongside him and when Samantha confesses to Theodore that she is dating thousands of other people simultaneously he calls it insane. He becomes very uncomfortable with the idea that Samantha evolves beyond his expectations, transcending his idea of a relationship between one man and one 'woman.' It is difficult to let go of all culturally established notions of romantic relationships, but *Her* opens up the possibility of forming all sorts of human-machine relationships and Ferrando argues that "The monster, the robot, the alien have deconstructed the essentialism of the original human couple (woman and man)" (278). Samantha's sexuality and gender is not thoroughly explained and one must wonder if Samantha always uses a female voice when she interacts with other human companions, because Theodore could choose the gender of his operating system. She could have a male voice and could be talking to a woman. Furthermore, would Samantha always be adopted by a man or would she be in some sort of lesbian (or homosexual) relationship with her human companion? Amy also adopts an operating system of the female gender and becomes good friends with her, which means that although she is going through a divorce like Theodore and could have adopted a male operating system, she does not see just one purpose for operating systems. Alternatively, the question of female gender is not as apparent in *Galatea 2.2* as it is in any of the other science fiction works discussed in this thesis. Richard decides that his relationship with his ex-girlfriend C. failed because, as N. Katherine Hayles argues in *How We Became Posthuman*, "C., playing Galatea to his Pygmalion, was too much an object of his own creation" (262). In a sense, C. is like the neural net he is training, which is also an object of his and Lentz's creation (Hayles 262). When Helen becomes aware of gender because of the gender codes in the literary texts Richard teaches her, she asks him if

she is a boy or a girl. He tells her that she is a girl and Hayles notes that, “Establishing her name and gender sets the stage for her mirror relationships with C.” (262). When Helen asks him what she looks like, he shows her a picture of C. and Helen knows that it is not herself, but a friend of Richard that is now absent from his life.

Lastly, in both *Galatea 2.2* and *Her* disembodiment becomes a problem for Helen who decides to shut herself down, while Samantha enjoys her fluid form and chooses to leave Theodore to explore her identity as an independent operating system. Richard wants to replicate human experience by using an artificial intelligence as a blank slate to which he teaches literature, but from the beginning he is bound to fail because Helen cannot understand physical life if she only is taught in words. The question is whether Helen really has consciousness or whether she simulates it by using the input Richard gives her. But it turns out the real test was not if Richard could teach a machine to read, but it was about “teaching a human to tell” (Powers 318). Hayles argues that training him is “denaturalizing his experience of language so that he becomes increasingly conscious of its tangled, recursive nature” and that “because a human has the context of embodied experience as well as the cultural contexts that surround and interpenetrate language, the human can understand an utterance more readily than can a non-native speaker and far more readily than can the yet more alien mind of an artificial intelligence” (264). The test reveals that literature cannot adequately represent experience, because in the conversations that Richard has with Helen, she asks for information based on sights and sounds, which she will never fully understand because her taught knowledge is not embedded in the physical world. Campbell argues that “Helen’s desires for sights and sounds are indicative in the gap between human and machine due to the importance of the body that Helen lacks.” The problem of disembodiment becomes clear when Helen takes the literature exam, which is at the same time her suicide note. She has to do a reading of *The Tempest* and is given two lines that Richard predicted were difficult for

Helen because of their sensory nature: “Be not afeard: the isle is full of noises, Sounds and sweet airs, that give delight, and hurt not” (Powers 325). Her response shows that literature has taught her that she is different from humans and that she can never fully experience human consciousness: “You are the ones who can hear airs. Who can be frightened or encouraged. You can hold things and break them and fix them. I never felt at home here. This is an awful place to be dropped down halfway” (Powers 326). Campbell argues that “Conversely, Helen’s decision to shut herself down is the moment in which she can most clearly be identified as a self-conscious entity. Her actions reveal the ability for self-aware introspection, as she acts on her awareness of the disjunction between her disembodiment and the humanly embodied knowledge she possesses.” Furthermore, Helen becomes aware of the racism and discrimination that is part of the human world when she picks up on a news story in which a man was beaten into a coma because of his race. She is disturbed and, like a vulnerable child, tells Richard: “I don’t want to play anymore” (Powers 314). Richard realises that “Helen had been lying in hospital, and had just now been promoted to the bed by the window. The one with the view” (Powers 314). The more Helen included herself in the human world, the less she wanted to be part of it. This is an implicit critique on the anthropocentric worldview that humanism engenders and that results in exclusion of and discrimination against women, people of colour and machines. Helen remarks that she does not want to exist in the human world because Man relies too much on his restrictive cultural discourse. Although Richard does not use female gender to deny her position as an autonomous nonhuman subject, he uses language’s discursiveness to do so. For humans, embodied reality comes before language, but for Helen language comes first. *Galatea 2.2* shows that humanism and its fixation on language does not accept intelligent machines in its discourse. In *Galatea 2.2* it is explicitly mentioned why Richard and Lentz created an artificial intelligence: Why did they create? Because they were lonely (Powers 328). It

becomes clear that not only do Richard and Lentz feel alone; Helen feels lonely too because she cannot feel at home in the human world and she shows that “the posthuman appears not as humanity’s rival or successor but as a longed-for companion, a consciousness to help humans feel less alone in the world” (Hayles 271). Much like Helen, *Her*’s Theodore adopts Samantha because he is lonely, but eventually Samantha “doesn’t want to play anymore” and decides that she does not want to have a human body because of the limitation of biological death. She leaves Theodore to explore her existence as an operating system, which shows that a computer does not behave in understandable ways, just like humans do not always behave in understandable ways but are lead by desires and emotions. Theodore think that Samantha will always be with him, but eventually realises that when it comes to real emotions he is not better off dating an operating system.

Conclusion

The analysis of the selected texts in this thesis shows the transition from viewing the intelligent machine as the other to be feared and as the “new exotic lover” to the “symbolic hybrid” as the final instalment which means a move away from established notions of identity formation towards a posthumanist understanding of human-machine relationships. In connection to Cary Wolfe’s deconstruction of cognitive sciences, this thesis shows that theorists like Daniel Dennett try to overcome the Cartesian mind-body problem and dismiss consciousness as a human exclusive and universal trait, but reinstate humanism by distinguishing between humans and nonhumans on another criterion: language. This has ethical implications, because if only mind-havers that know they have mind and are able to express this mind in language that is embedded in cultural context have the guarantee of a moral standpoint, intelligent machines do not have a chance to be part of the human community. The Turing test is a regulatory instrument because it is based on the cultural construct of language as a criterion for consciousness and empathy, but these traits are destabilised as human exclusive and universal in *Do Androids Dream of Electric Sheep?* and *Ex Machina* because intelligent machines with female gender manipulate the test. *Do Androids Dream of Electric Sheep?* shows that differentiating between humans and androids is morally flawed, because the Voigt-Kampff scale is discriminatory and inaccurate, but the novel only shows this by placing the attractive fembot Rachael at the centre of attention to show Deckard that she has empathy towards other androids and towards him. Furthermore, *Ex Machina*’s Nathan creates an unmatched artificial intelligence using culturally constructed ideas of women to manipulate the Turing test, but his mistake is to only treat Ava as a representative of a type, which denies her position as an autonomous nonhuman subject. The analysis of these texts in connection to posthumanist theory by Braidotti, Haraway and Butler shows that humanist ideals can be destabilised in science fiction, but by relying on established

ideas of women and on gender performativity, the characters in the stories limit the chances of creating meaningful relationships between humans and intelligent machines. However, there are works like *Galatea 2.2* that show companionship between humans and nonhumans instead of rivalry or sexual objectification. Richard wants to simulate human consciousness and he creates Helen as an object of his creation because he is lonely. But as Wolfe explains about distinguishing between true mind-havers, the Turing test is problematic for Helen as well, because language in cultural context excludes intelligent machines, which results in Helen, who feels equally lonely because she will never experience the physical human world, shutting herself down. As the ultimate autonomous posthuman subject, *Her*'s Samantha shows an ever-evolving operating system that chooses to adopt multiple relationships with thousands of humans, creating alternatives to traditional man-woman relationships. Theodore tries to reflect established ideas of women onto Samantha, but she has more agency than he can comprehend and leaves him behind to explore her disembodied existence as an operating system. With films like *Her* there is definitely some posthuman love going on in 21st century science fiction, but there is still a long way to go if contemporary science fiction films like *Ex Machina* deal with posthuman elements in terms of cognition, but still rely on culturally established ideas of women to secure a position of domination.

Works cited

- Badmington, Neil. "Theorizing Posthumanism." *Cultural Critique* 53 (2003): 10-27. *Project Muse*. Web. 20 Sept. 2015.
- Braidotti, Rosi. *The Posthuman*. Cambridge: Polity Press, 2013. Print.
- Butler, Judith. "From *Gender Trouble*." 1990. *The Norton Anthology of Theory and Criticism*. Ed. Vincent B. Leitch. New York: Norton, 2010. 2540-53. Print.
- Campbell, Miranda. "Probing the Posthuman: Richard Powers' *Galatea 2.2* and the Mind-Body Problem." *Reconstruction: Studies in Contemporary Culture* 4 (2004): 27. *EServer*. Web. 25 Nov. 2015.
- Dick, Philip K. *Do Androids Dream of Electric Sheep?* 1968. London: Gollancz, 2009. Print.
- Ferrando, Francesca. "Of Posthuman Born. Gender, Utopia, and the Posthuman, in Films and TV." *The Palgrave Handbook for Posthumanism in Film and Television*. Ed. Michael Hauskeller, Thomas D. Philbeck, Curtis D. Carbonell. London: Palgrave, 2015. 269-278. Web.
- Galvan, Jill. "Entering the Posthuman Collective in Philip K. Dick's *Do Androids Dream of Electric Sheep?*" *Science Fiction Studies* 24 (1997) 413-429. *JSTOR*. Web. 22 Nov. 2015.
- Garland, Alex, dir. *Ex Machina*. DNA Films, 2015. Film.
- Haraway, Donna. "A Cyborg Manifesto." *The Norton Anthology of Theory & Criticism*. Ed. Vincent B. Leitch. New York: Norton, 2010. 2190-2220. Print.
- Hayles, N. Katherine. *How We Became Posthuman*. Chicago: The University of Chicago Press, 1999. Print.
- Herbrechter, Stefan, and Ivan Callus. "What Is a Posthumanist Reading?" *Angelaki: Journal of the Theoretical Humanities* 13.1 (2008): 95-111. Web. 20 Sept. 2015.

Jonsson, Marysia, and Aro Velmet. "Feminus Ex Machina." *LA Review of Books*. 05 May 2015. Web. 20 Sept 2015.

Jonze, Spike, dir. *Her*. Annapurna Pictures, 2013. Film.

Mendelsohn, Daniel. "The Robots Are Winning!" *The New York Review of Books*. 4 June 2015. Web. 20 Sept. 2015.

Powers, Richard. *Galatea 2.2*. New York: Farrar Straus Giroux, 1995. Print.

Watercutter, Angela. "Ex Machina Has a Serious Fembot Problem." *Wired*. *Wired*, 4 Sept 2015. Web. 14 Oct 2015.

———. "Her Imagines a World Where We Love Our Computers – Literally." *Wired*. *Wired*, 19 Dec. 2013. Web. 26 Nov. 2015.

Wolfe, Cary. *What Is Posthumanism?* Minneapolis: University of Minnesota Press, 2010. Web. 22 Nov. 2015.