PORTFOLIO IN ENGLISH LITERATURE

PROGRAMMED TO FLIRT: THE GENDERED

TECHNOLOGICAL BODY IN

R.U.R. AND *EX MACHINA*

By

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Abstract: In this portfolio I first introduce the content of my work throughout my graduate studies in my Portfolio Statement. I then begin my lead paper on the gendered technological bodies present in Karl Čapek's play *R.U.R.* and the film *Ex Machina.* I interrogate both works in light of N. Katherine Hayles's seminal work *How We Became Posthuman* in order to demonstrate how gendered technological bodies present a problem to the kind of utopian posthumanism Hayles theorizes.

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CHAPTER I

PORTFOLIO STATEMENT

My portfolio for a Master of Arts in Literature consists of papers from a variety of seminar classes that focus on a range of genres and approaches to literary criticism. Recurring genres include early twentieth century dramatic literature and the poetry of women. I draw from a variety of feminist critical theorists, Donna Haraway to Stacy Alaimo, in order to show how their theories can inform texts by and about women. My program of research is primarily driven by questions that contest different types of essentialism. I interrogate essentialism through literary criticism and analysis of character agency in my primary texts.

Feminist criticism plays an important role in nearly every paper, including two papers that address pre-twentieth century women's poetry. In both papers, I examine how the agency of women as writers and characters contrasts with the material reality of a patriarchal society. In "The Transgressive Poetry of Katherine Philips" I argue that her poetry, while traditional and conservative on the surface for a seventeenth-century poet, contains homosocial and feminist undertones. In "Marriage of the Split Self: Uniting Irreconcilable Dualities in Four Fallen Woman Monologues," I make the argument that the character of the fallen woman in the fallen women monologues of the nineteenth century is not as one-dimensional and formulaic as she may appear on the surface. Through an examination of four representative fallen woman monologues, I make the case that the female writer can and does imbue her fallen woman

characters with rich and complex agency, morality, and internality. In both papers, feminist critical techniques are employed to reexamine the works of woman poets and their female protagonists in harshly patriarchal societies.

The examination of dramatic literature of the early twentieth century is another recurring focus throughout my portfolio. In "Forms Molded for Us: Susan Glaspell's *The Verge* and Ecofeminism," I use Stacy Alaimo's ecofeminism to interrogate Susan Glaspell's *The Verge,* a 1920 production of the Provincetown Players. I use comedy theory to explicate the enduring legacy of the Kaufman and Hart 1939 play *The Man Who Came to Dinner.* Both paper use different theoretical frameworks to look back on early works of American dramatic literature to address their lasting influence. The question of dramatic influence also drives my lead paper, which concerns posthumanism as it appears in drama and film spanning the twentieth century through two representative examples.

Thie lead paper, "Programmed to Flirt: Gendered Technological Bodies in *R.U.R.* and *Ex Machina,*" comes from an early paper for Introduction to Graduate Studies. The original paper looked at the 1921 Czech play *Rossum's Universal Robots (R.U.R.)* in light of N. Katherine Halyes's *How We Became Posthuman.* I chose it for my lead paper because of my deep interest in posthumanism and science fiction. I wanted to look closely at the gendered portrayal of technological bodies, something my original paper did not address. I decided that examining *R.U.R.* and the portrayal of gendered technological bodies gave me the opportunity to connect my interest in early twentieth century drama with feminist criticism – my primary interests throughout my portfolio. Through this examination of gendered technological bodies, I could address the intersection of posthumanist and feminist criticism. I noticed an insistence on gendering technological bodies in *R.U.R.* and I wanted to examine how this gendering

underscores a heteronormative and heterosexist portrayal of technological bodies gendered female.

This heteronormative insistence on gendering, particularly the female, technological body reinscribes essentialist notions of female gender norms throughout *R.U.R.* The gendering of technological bodies and the repercussions of this fly in the face of the way Hayles presents posthumanism's potential to provide a means out of gender dichotomies. My original paper addressed the gender and sexuality of the technological bodies in *R.U.R.* only tangentially. In my revised work, I examine how the play's conclusion depends upon technological bodies to not only represent a heteronormative male/female relationship, but also an Eden narrative redux that reinforces outdated notions of liberal humanist essentialism.

In order to more fully examine these claims about how technological bodies in science fiction narratives can reinforce essentialism, I decided I needed to add a representative contemporary text that contains gendered technological bodies. I chose Alex Garland's 2015 film *Ex Machina* as a representative contemporary text containing gendered technological bodies*.* Examining *R.U.R.* and *Ex Machina* together allowed me to look at science fiction texts that bookend the twentieth century's portrayal of technological bodies in light of Hayles's analysis of posthumanism. It is worth noting that other papers in my portfolio primarily focus on one primary text and one critical theory. Though I do comparative work with the fallen woman monologues, adding a second primary text from a different genre and medium for my lead paper pushed me methodologically. By adding a second and more contemporary text, I was able to examine changes in the portrayal of gendered technological bodies in the twentieth century. I examine both *R.U.R* and *Ex Machina* in light of Hayles's seminal notions of posthumanism, as well as in light of more recent scholarship on gendered bodies in science fiction. The expansion of the paper draws from the earlier paper's general engagement with Hayles's posthumanism,

but develops it to address how gendered technological bodies work within Hayles's framework. I look at how my primary works succeed as texts engaged with posthumanism and how their gendered technological bodies reinscribe essentialist liberal humanist notions. In order to make these claims about technological bodies reinforcing essentialist notions of humanism, I looked to publications doing the same thing with similar popular texts. These publications include Ingvill Hellstrand's essay "The Shape Of Things To Come? Politics Of Reproduction In The Contemporary Science Fiction Series 'Battlestar Galactica.'" This essay examines a popular text in order to show the ways the text diverges from the foundations of posthumanism in its gendered portrayal of technological bodies.

The targeted journal I've chosen for this paper is DePauw University's *Science Fiction Studies,* which publishes articles and reviews on a range of subjects and media relating to science fiction. *Science Fiction Studies* has a three-step peer review and revision process and submissions must be 5,000 – 15,000 words written in MLA Style. I examined a number of journals for submission and chose *Science Fiction Studies* because of its previously published material. I noticed a number of articles that deal with contemporary texts from a variety of genres, many of which compare and contrast popular science fiction texts with canonical texts. I first looked at journals focused on film and theatrical publications, but found that thematically my paper works best within the science fiction framework, rather than the journals focused solely on drama or film. Given my paper's examination of two popular science fiction texts from different genres, I felt *Science Fiction Studies* was the best fit.

CHAPTER II

PROGRAMMED TO FLIRT:

THE GENDERED TECHNOLOGICAL BODY IN

R.U.R. AND *EX MACHINA*

Sentient technology usurping humans as the dominant species on the planet is such a prevalent

plot device in science fiction, dystopian literature, and B-movies it is almost a cliché. But the

struggle between an underlying fear of inhuman sentience and the desire to continually advance

technology regardless, is a key question in N. Katherine Hayles's account of posthumanism and

the specific ways she claims posthumanism can provide a means of "getting out of some of the

old boxes, and opening up new ways of thinking about what being human means" (Hayles 285).

Hayles's foundational work *How We Became Posthuman* (1999) addresses how embracing the

posthuman does not mean embracing the end of humanity as science fiction plots may imply,

but rather embracing "the end of a certain conception of the human, a conception that may

have applied, at best, to that fraction of humanity who had the wealth, power and leisure to

conceptualize themselves as autonomous beings exercising their will through individual agency

and choice" (Hayles 286). Hayles argues that the posthuman is not lethal; rather, it is the

"grafting of the posthuman onto a liberal humanist view of the self" that is lethal (Hayles 287).

Hayles argues that posthumanism provides a means out of a liberal humanist view of the self

that is grounded in essentialist notions of humanity and consciousness.

While Hayles's posthumanism attempts to break down the boundaries of the liberal humanist subject, I will address how this is disrupted by the representation of gendered technological bodies, which reinscribe gender boundaries. Through an examination of the portrayal of gendered technological bodies in Karl Čapek's 1921 play *Rossum's Universal Robots (R.U.R.)* and Adam Garland's 2015 film *Ex Machina,* I examine how the gendered portrayal of technological bodies reinscribes heteronormative notions of gender. If *R.U.R*[1] is an early and popular example of the treatment of gendered sentient technology, then *Ex Machina* represents the most contemporary, popular example of this same treatment. Interestingly, *R.U.R.* and *Ex Machina* can both be read through a posthumanist lens, insofar as they challenge essentialist liberal humanist notions of "humanity." However the presence of gendered technological bodies reinscribes gender differences in both works, albeit in different ways; this throws into question the ability of a work to critique essentialist notions of humanity without also critiquing and addressing essentialist notions of gender.

To put my argument another way, Examining *R.U.R*. and *Ex Machina* together in light of Hayles's posthumanism demonstrates the way technological bodies made female satisfy a pervasive trope in science fiction – the trope of subjugated creation rising up against creator; but an examination of these works also demonstrates a limitation to the kind of anti-essentialism these texts attempt to portray. Hayles conceptualized posthumanism as:

> offer[ing] resources for the construction of another kind of account [of science]. In this account, emergence replaces teleology; reflexive epistemology replaces a body seen as a support system for the mind; and a dynamic partnership between humans and

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[1] Ivan Klima's introduction to the 2004 translation of *R.U.R.* explains that Čapek's play premiered at the Prague National Theatre in 1921 and transferred to Broadway the next year.

intelligent machines replaces the liberal humanist subject's manifest destiny to

dominate and control nature. (Hayles 288)

The technological bodies in both works come to represent a conception of what it means to be

human beyond the liberal humanist view, as they affront their subjugation and reject teleology,

and suggest that programmed consciousness and inorganic origins are not necessarily "other" to

humanity. While the dividing line between human and machine is effectively blurred in both

works, gendering the technological bodies reestablishes essentialist notions of gender, rending

any critique of humanist essentialism insufficient if gender essentialism persists. A close

examination of the treatment of gender in *R.U.R.* reveals a foregrounding of the difficulty of

reading Hayles's liberatory account of posthumanism into a text when a gendered technological

body is present in science fiction. I address this difficulty through interrogating *R.U.R.* in light of

Ingvill Hellstrand's work with similar issues in the science fiction television series *Battlestar

Galactica.* I go on to argue that *Ex Machina* demonstrates similar issues regarding the

application of N. Katherine Hayles's posthumanism to contemporary science fiction texts where

a gendered technological body is present. However, *Ex Machina* negotiates these issues by

presenting a gendered technological body that affronts essentialist notions of its gender. *R.U.R's*

gendered technological bodies rely on essentialist notions of gender and reproduction, while *Ex

Machina's* gendered technological bodies fight against the kind of essentialist gender ideals that

are imposed on them.

Anti-essentialism in *R.U.R.* and *Ex Machina*

Despite key differences in their representations of the gendered technological body, in many

ways both *R.U.R.* and *Ex Machina* resist an essentialist view of humanity – specifically one that

assumes consciousness must be organically acquired and not programmed. *R.U.R.* additionally

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questions the inhumanity of inorganic machines that can feel pain, while *Ex Machina* questions the denial of the rights and freedoms to a thinking and feeling machine, as well as the investiture of such rights and freedoms based on a logic that equates lovability with humanity. In short, both works blur the dividing line between human and machine. Rossum's robots and Ava the AI demand that organic humans reevaluate what constitutes consciousness and by extension humanity. Rossum's robots and Ava are thus in certain ways emblematic of Hayles's foundational conception of the posthuman. Hayles asserts that we are already posthuman and the conditions necessary for a posthuman existence were set in place following WWII. Vaccinations, contact lenses, pacemakers, and other seemingly innocuous technologies introduced into the human body, along with the development of information technology has distanced people from our humanist predecessors. These technological conditions mean that all people are no longer purely and organically human. Humanism and the "human condition" are not therefore sufficient monikers for what humans have become.

In the case of *R.U.R,* the robots' inorganic vessel is human-like in every way. It is only the robots' supposedly lesser consciousness and personality traits that separate them from the organic humans. At first glance the robots are often confused for organic humans and only through perceived differences in information acquisition, consciousness, and behavior are they made other. These perceived differences are eventually alleviated. When a single element of what their designers designate as "humanity" is introduced into their makeup – the ability to feel pain, the border between the robots and their organic creators is further compromised. Helena's continued insistence that the robots can have souls if slight alterations are made indicates a desire to have robots blur the border between machine and organism. The robots of *R.U.R.* resist a certain essentialism that dictates that a machine cannot have a complex consciousness or, as Helena defines it a "soul."

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Furthermore, *R.U.R.* also suggests the robotness of organic humans. After Helena confuses the factory robots for organic humans she immediately confuses the only organic humans on the island for robots. This comical moment reveals Helena's plan to incite rebellion in the robots, but it also indicates to the audience that the robots and humans are interchangeable. The power structure between the robots and humans therefor is about an arbitrary notion of humanity rather than any material reality of either the humans or robots. The factory director, Domin, dreams of a future where robots perform all the manual labor and menial tasks, freeing "man" from the burden of "destroy[ing] his soul doing work that he hates" (Čapek 21). Of course Domin's dream is flawed; he does not realize that the robots will desire the same freedom because he does not fully appreciate how close to humans the robots are. More importantly, what his dream does reveal is the robotic nature of humans. Domin portrays people as cogs in a mechanism and Fordist pieces in the "human machine" (Čapek 17). Fabray, the chief engineer of the factory, laments that "the human machine…was hopelessly imperfect. It needed to be done away with once and for all" (Čapek 17). The humanness of the robots and the robotness of the humans suggests the fluidity between the two, destabilizing a liberal humanist view of humanity that conceptualizes humans and human consciousness as essentialist and unique.

Ex Machina destabilizes a similar narrative of human exceptionalism and essentialism. The AI of *Ex Machina* resist essentialism through their physicality, and one AI in particular resists the humanist, essentialist notion that lovability is an indicator of humanity. Much like the robots in *R.U.R,* the AI of *Ex Machina* have a physicality that suggests the blurring of the line between human and machine. This blurred line is further developed by the desire of the AI's creator, Nathan, to build an AI whose consciousness can pass as that of an organic human. Caleb, a young programmer, is invited to the secluded mountain compound of his employer, Nathan, to be the human component in a Turing Test, which will test the consciousness of an AI. In order to

pass the test, the AI must fool the human into believing that it is not a machine. Ava, Nathan'a AI, is physically very clearly machine-like. The mechanical whirring of her metal and plastic body and her exposed wires and gears constantly remind the viewer and Caleb that, while her body is shaped like an organic human woman, it is composed of inorganic material. Her body is neither completely human nor completely machine. Her face is covered in a layer of simulated skin, while her body below the neck is metal and fiber optics. Ava's physicality is a blend of human and machine, and through this physicality, her representation resists the same kind of essentialist notions present in *R.U.R;* the line between human and machine is not as distinct as liberal humanist philosophy suggests.

Ex Machina further suggests an anti-essentialist view of humanity by refusing to define Ava as "human" by virtue of her lovability. Caleb insists that Ava passes the Turing Test, but the incontrovertible proof for him comes in the form of his sustained sexual and romantic attachment to Ava. Caleb's sustained sexual attraction to someone he knows is not organic demonstrates his *own* acceptance that her selfhood is more than the inorganic origins of her body. It is suggested throughout the film that it is Nathan's plan to test Ava's consciousness by proving that an organic human can fall in love with her. Caleb's attraction certainly catalyzes his desire to free her from Nathan's control. Both men try to prove Ava'a consciousness and humanity through her ability to submit to a heteronormative narrative. Ava's lovability becomes the litmus test by which Nathan and Caleb judge her humanity. The film itself resists this reading; rather, it suggests that humanity by virtue of lovability is the experience of subjugated women and Ava is no exception to this treatment. Ava's eventual liberation resists the narrative that her humanity is only verifiable through her lovability. Being subjugated and quizzed about her personhood objectifies Ava, and the final act of the film (which will be discussed in detail in the next section) suggests that Ava resists this objectification. Ava refuses to have her lovability

be the definition of her humanity by negating the heteronormative narrative outlined for her by Nathan and Caleb. She resists the essentialist notion that the proof of her female humanity is her ability to love and be loved. Ava and the film resist this essentialist liberal humanist notion of personhood as defined by lovability.

Ex Machina further defies the liberal humanist logic that lovability is something an individual "has." Liberal humanist logic aligns individualism and personhood with possession. Hayles attempts to examine the posthumanist shift in subjectivity from the liberal humanist point of view by recalling one of the "definitive texts characterizing the liberal humanist subject: C.B. Macpherson's analysis of possessive individualism. 'Its possessive quality is found in its conception of the individual as essentially the proprietor of his own person or capacities,'" Hayles quotes (Hayles 3). Caleb and Nathan impose their own essentialist liberal humanist ideals of female personhood onto Ava, namely a personhood dependent on the possession of lovability. Ava rejects lovability as indicative of her personhood and the film rejects that lovability is something an individual can essentially possess. Ava's rejection of her lovability and, therefore, her possessive individualism flies in the face of liberal humanist essentialism.

The AI of *Ex Machina* and the robots of *R.U.R.* have a consciousness that is not considered organic by the humans that design them, but their existence nonetheless challenge essentialist notions of what it means to be human. In many ways they are representative of Hayles's utopian view of posthumanism and its potential to alleviate the dividing lines between perceived irreconcilable dualities. This is to say that in certain ways, *R.U.R.* and *Ex Machina* present technological bodies with thoughts, feelings, and agency that resist the liberal humanist essentialist notion whereby to have a consciousness, and by extension humanity, is defined as *not* being an unfree machine. However this anti-essentialist blurred barrier between human and

machine is rendered insufficient when the gender barrier is in place. Any anti-essentialist critique of the human/inhuman and subject/object dualities is destabilized if the male/female duality is still reinforced, as it is in both *R.U.R.* and *Ex Machina*.

Gendered Technological Bodies and Essentialism in *R.U.R.* and *Ex Machina*

I have demonstrated that *R.U.R.* and *Ex Machina* utilize technological bodies to resist essentialist notions of humanity and blur the boundary between humans and machines. However, essentialist notions of subjectivity are reaffirmed when portrayals of technological bodies are gendered female. When the physical female form of a technological body is expected to subscribe to gendered expectations of "woman," essentialist liberal humanist notions of subjectivity are reinforced, namely essentialist gender expectations. *R.U.R.* and *Ex Machina* both present gendered technological bodies that not only look female, but also are expected to subscribe to essentialist notions of female behavior, namely subservience and reproduction.

My analysis of gendered bodies in *R.U.R* and *Ex Machina* is inspired by Ingvill Hellstrand's essay "The Shape of Things to Come? Politics Of Reproduction In The Contemporary Science Fiction Series 'Battlestar Galactica'" (2011), which discusses the tendency of science fiction works like *Battlestar Galactica* (*BSG*) to present surface level opportunities for viewing technological bodies as anti-essentialist, which eventually fall back into essentialist views of gender. Hellstrand argues that *BSG* reestablishes traditionalist views through its use of gender and reproductive narratives. She asserts that *BSG* is indebted to a "long-standing science fiction tradition of negotiating ontological differences between human beings and machine Others: Nature/technology, subject/object, free/programmed, and reproductive/replicant" (Hellstrand 11). Hellstrand goes on to assert that *BSG* uses these categories of difference to the effect of reestablishing gender differences.

Hellstrand's analysis suggests how technological bodies in science fiction may alleviate certain dualisms while underscoring others (most notably gender), and so stop the "way out of the maze of dualisms" that feminist theorist Donna Haraway imagined as the endgame of the figure of the cyborg in her seminal essay "A Cyborg Manifesto" (1983) (Haraway 2220). The technological body as representative of posthumanism is often lauded as a theoretical means out of the limiting and stifling notions of humanist essentialism and determinism – by crossing the line between organic human and machine, other divisions have the opportunity to fall away, specifically divisions of race, class, and gender. Hellstrand demonstrates that what appear to be positive views of technological bodies as emblematic of Hayles's anti-essentialist posthumanism may actually reinscribe traditional female essentialism through the gendered technological body. What Hayles outlines as a potential opportunity to break away from gender difference and essentialism may end up being a reinforcement of traditional notions of gender and reproduction. *R.U.R.* and *Ex Machina* confirm Hellstrand's fear of the gendered technological body reestablishing gender norms. However, the negotiation of a gendered *and* anti-essentialist technological body in *Ex Machina* suggests the ability of a technological body gendered "woman" to nonetheless resist essentialist notions of female reproductive labor and dependency.

Gendered technological bodies in *R.U.R* at first only serve a social purpose. Some robots are gendered female only to meet a certain expectation of work environments in the early twentieth century. "There's a certain demand for them, you see. Waitresses, shopgirls, secretaries – it's what people are used to" (Čapek 22), Domin explains to Helena. Domin's consumers expect that the workers who carry out stereotypically gendered tasks reflect those genders, and thus he must make his robots look like stereotypical women. Domin thinks little about it until Helena points it out. Regardless, this gendering sets the framework for the play's

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conclusion, which reinscribes a reproductive imperative onto the gendered technological body. Quoting from the Bible, Alquist looks on as two robots reenact the Eden narrative, and says "and then God said unto them, be fruitful and multiply, and replenish the earth, and subdue it" (Čapek 84). This assertion of reproductive necessity is presented as the possible solution to the end of humanity, and it underscores heteronormative hierarchies for the robots.

The organic humans of the play establish gendered hierarchies in such a heightened and unrealistic way that it comes off as comical, while also foregrounding the gendered hierarchies that are forced on the robots at the end of the play. This dynamic hint at the possibility that *R.U.R.* will satirize sex and gender roles, but the play ends up suggesting their maintenance is deadly serious. Throughout *R.U.R.* all of the human men are demonstrably in love with Helena, the only woman on the island where the robot factory is, and vie for her affection. She marries Domin, the factory manager, but Dr. Gall is willing to experiment with the foundational makeup of the robots to please Helena, while the rest fawn over her and wait on her hand and foot. They are immediately attracted to her and claim themselves in love. They behave unrealistically and in such a way that drives home their isolation and need for contact that is sexually or romantically driven. It is almost comical the way she is put on a pedestal and worshipped. On her tenth anniversary on the Island each man gives her an unreasonably extravagant gift, culminating in a gunboat. In response to Helena's astonishment, Domin's only response is "they all like you *very* much" (Čapek 28). She is surreptitiously treated with such reverence and as a definitive other, due to her beauty and by extension her gender and reproductive capabilities. Hints of the oncoming infertility of human women are already circulating when Helena arrives on the island, and Helena is "mobilized as the source or carrier of eggs and embryos," as Hellstrand describes the female humans and humanoid Cylons of *BSG* (Hellstrand 13). The heteronormativity of Helena and the human men in *R.U.R.* eventually is reflected in the robots

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of the island, as I will discuss later. This heteronormative gendering and hyper-heterosexism has an important bearing on the conclusion of the play. At this point it is enough to say that the hierarchy of gender difference and the essentialism of gender is gently mocked but firmly established both in the humanoid robots and the organic humans of *R.U.R.*

In *Ex Machina,* the gendering of AI is emblematic of the ways essentialist notions of gender reestablish dividing lines that are otherwise challenged by the positive view of technological bodies. Caleb asks Nathan about Ava's sexuality very early on in his interactions with her. After Ava dons the iconography of hyper femininity, a floral dress and tights to conceal her mechanic legs, arms and torso, she spins around with demure femininity and sensual suggestive looks toward Caleb. Caleb senses she is flirting with him and senses Nathan might have ulterior motives for giving his humanoid AI a gender that is stereotypically female. Caleb asks Nathan outright: "why give her a sexuality? An AI doesn't need a gender. She could have been a gray box" (Garland). Nathan's response is reminiscent of Moira Gatens's assertion in *Imaginary Bodies, Ethics, Power and Corporeality* (1996) that the corporeal body which is biologically determined is historically and culturally specific with a sociality that determines it. There is no neutral body for Gatens, which, as Ingvil Hellstrand determines in her essay "The Shape of Things to Come" (2011), means that "conceptualizations of the body and, in turn, embodiment rely on hierarchical identity categories, such as gender, sexuality, and race" (Hellstrand 13). Nathan assures Caleb that in order for his AI to be truly conscious and to, it is hinted, pass as human, they must be humanoid and have a sexuality. "Can consciousness exist with out interaction?" he asks Caleb: "what imperative does one gray box have to interact with another gray box?" (Garland). He asks Caleb to name "an example of consciousness at any level that exists without a sexual dimension" (Garland). What Nathan fails to understand about the

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repercussions of gendering an otherwise unnecessarily gendered body is that it builds a dividing line that need not be there otherwise.

Furthermore, Nathan conflates sexuality with essentialist notions of male and female gender, not to mention the control he wields in "programming" Ava heterosexual. Nathan seems to believe that any truly conscious AI would need a sexual dimension, though what he really presents is a gender dimension. This heteronormative categorizing of his AI does not represent the kind of boundary blurring creature that Donna Haraway, for example, supposes a conscious technological body to be. Haraway wants her mythical cyborg to "consider more seriously the partial, fluid, sometimes aspect of sex and sexual embodiment" (Haraway 2220). She believes "Gender might not be global identity after all, even if it has profound historical breadth and depth" (Haraway 2220). Ava is designed and socialized through interaction to be heterosexual, flirt with Caleb, and use her stereotypical gendered traits to interact with organic humans. Nathan's insistence that a consciousness have a gender dimension establishes a heteronormative hierarchy that reasserts hegemonic power structures.

Caleb, falling back on his own notions of evolutionary essentialism, questions Nathan's decision to gender of his AI, pointing out that examples of accidental biological consciousness have "sexuality as an evolutionary reproductive need" (Garland). Caleb relies on the essentialist notion that sexuality *is* biologically linked to reproduction, thus Ava and Kyoko, Nathan's previous AI, theoretically do not have this same need, according to Caleb's interpretation. Caleb assumes that since their sexuality is not biologically linked to reproduction that they do not need a gender or sexuality, though it is never explicitly stated if their sexual organs have a purpose other than pleasure. Nathan's move to gender, and to "program [his AI] to be heterosexual" (Garland), creates a hierarchal category for Ava. Similarly his earlier AI, Kyoko, is

also categorized into essentialist gender roles. At first she is camouflaged as an organic human servant and she engages solely in domestic responsibilities. The audience only sees her performing household chores, like cooking and waiting on Caleb and Nathan, while Nathan is shown constantly lifting weights and boxing, reestablishing their categories as male physically dominate and female physically submissive. Kyoko's eyes are cast down as she serves Nathan and her body becomes a commodity for Nathan's sexual desires.

Through these stereotypical moves to gender his AI as subservient female, Nathan reinscribes a stereotypical gender norm onto a machine that could otherwise be genderless. Caleb believes Nathan has done this as a diversion tactic in order to fake out the human component of the Turing Test. If Caleb is misdirected by "the hot magician's assistant" (Garland), as he refers to Ava's sexuality, then he will be more easily convinced of her consciousness. Hellstrand says of *BSG* that she is "particularly concerned with the consequence of conceptualizing the posthuman body as a reproductive body" because in *BSG*, conceptualizing the posthumans body as reproductive turns reproduction into a commodified product (Hellstrand 13). Similarly, In *Ex Machina,* Ava and Kyoko's sexuality is not mentioned directly as reproductive, but it does serve to establish heteronormative hierarchies between Nathan and Kyoko, Caleb and Ava. Ava and Kyoko's sexuality as emblematic of heteronormative hierarchy, suggests that relying on the "necessity" of reproduction as justification for the "necessity" of gender is a weak rationale for the reinforcement of patriarchy.

This heteronormative hierarchy in both *R.U.R.* and *Ex Machina* presents a complicated picture of the relationship between posthumanism and feminism in both works. In *R.U.R* and *Ex Machina,* the move that genders the humanoid posthumanist body is also the move that lends them the

opportunity to be thought of as something other than a technologically advanced object. In the

eyes of the organic humans who sympathize with the humanoid robots and AI, gendering them

opens up a certain way of humanizing the technological body, and this humanization is

profoundly gendered: the AI become "human" only as objects of pity in need of protection. This

problematic conflagration of gender and humanity (and by extension rights and freedoms) in

R.U.R and *Ex Machina* complicates the ethics of posthumanism. As posited by Haraway and

outlined by Hayles, posthumanism can enable the tearing down of barriers between opposing

dualities, through, for example, the positive view of a blurred border between humans and

machines. However, in *R.U.R.* it is only the belief that men, and especially women, should

reproduce heterosexual relationships, that blurs the line between human and machine enough

for Helena to consider that the robots might have souls. It is also the reproduction of

heterosexual relationships that lets Alquist hope that the robot's ability to love might mean they

are capable of sexual reproduction as well. In *Ex Machina,* only the promise of a heterosexual

relationship allows Caleb to empathize with Ava and want to help her escape her oppressive

creator.

In both *R.U.R.* and *Ex Machina,* it is unsettling how the presence and promise of

heteronormativity spells the occasion where humans can sympathize with inorganic human

machines. Helena comes to Rossum's Universal Robots in order to make a case for their rights

and freedoms, but she is quickly convinced that the robots are other. When she finds out,

however, that the "male" and "female" robots are "simply indifferent to each other" and that

"sex means nothing to them" (Čapek 22), she pities them. This initial discovery that, despite

their "sex," they cannot live up to all that their sex implies mobilizes Helena to treat them more

like people, as she defines people, and to encourage Dr. Gall to imbue them with the capacity to

feel pain and eventually have a "soul." For Helena, the "soul" equates to the robots being able

to reproduce her overdetermined bliss with Domin. When Alquist is the final organic human left on Earth he sees a male robot's desire to protect a female robot from harm as a sign that they are capable of love and possibly of producing children. Alquist is unconvinced of their humanity until this moment. It is not until he can appreciate them as gendered beings capable of fulfilling the promises of their heternormative gender that Alquist is able to hope that the robots could truly replace humans and sustain their existence. In both instances it is the heteronormative gendering of the robots that allows Helena and Alquist to appreciate their potential for humanity as they define it.

In *Ex Machina* it is similarly Ava's stereotypically feminine gendered body and her perceived need of protection that draws Caleb to her. It is revealed that she was designed with Caleb's physical type in mind. Ava play-acts her own demure and feminine fear of Nathan and submission to his cruelty in order to win over Caleb's sympathies even further. Finally, when Caleb sees horrific footage of Nathan creating and eventually destroying his previous AI, Caleb is disgusted enough to finally act on Ava's behalf. He sees the previous versions of Ava naked with no indication of their mechanic insides. They are subjugated to Nathan's desire for perfection and they are stereotypical models of feminine beauty. Caleb sees these AI and is drawn to them physically and emotionally by their beautiful and vulnerable feminine forms. He is finally motivated to act against Nathan out of sympathy for these destroyed and seemingly helpless humanoid women and by his own masculine desire to protect Ava from harm. The visual move that genders and sexualizes Ava and her predecessors is the final motivating factor for Caleb to shed his beta male timidity and act out against alpha, hyper-masculine Nathan.

Again, the move that genders both the female robots in *R.U.R.* and the AI of *Ex Machina* is also

the move that opens up the possibility that the AI are more than machine and more closely

resemble humans. Robot Primus and Caleb's need to protect the female technological

humanoid body purely because it *is* female and thus supposedly needs protection from (but is

certainly subjugated by) male bodies, genders the otherwise technical instrument and limits her

mobility as genderless being outside of oppressive gendered expectations of reproductive labor

and dependency. However, this move also makes both female technological bodies objects of

sympathy, which renders them *almost* equals, which is to say, it renders them women. The need

to underscore one duality in order to blur the lines of another flies in direct opposition to the

kind of posthumanism Hayles envisions in *How We Became Posthuman.*

The endings of both works help suggest a key change has occurred in portrayals of technological

humanoid bodies in popular science fiction in the last hundred years. *R.U.R.* ends with a

reestablishment of the Adam and Eve narrative, something I term an Eden redux. The only hope

for life and human consciousness to continue on earth relies on a hope for heterosexual

reproduction between the robots – something that has been made clear the robots are

incapable of, since they "don't even exhibit traces of attraction" (Čapek 22), let alone the

biological ability. Alquist banishes two robots, one male and one female, from the island in a

perverse reworking of the Eden narrative, in the hopes that they can provide a miracleistic

solution to the robots inability to replicate themselves. But the play ends enigmatically and with

little hope. The humans are definitely all dead and the robots cannot replicate themselves. Only

a glimmer of hope of nearly divine intervention remains. This not only establishes a religiously

driven predestination, but also rests the hope of the repopulation on heterosexual normative

reproduction, again gendering the technological bodies and reestablishing the supposed

necessity of old norms.

Alquist hopes that, through the physical gendering of Robot Helena and Primus, reproductive gendering will magically occur as well. This hope "naturalizes a sexual dichotomy of women and men, where giving birth is assumed an essential task for all women" (Hellstrand 17), be they organically human or not. Hellstrand perceives this same traditionalist view of the reproductive female technological body in *Battlstar Galactica*, despite its surface level attempt toward gender balance. This instance of naturalizing a sexual dichotomy between woman and man is underscored in *R.U.R* by robot Helena's insistence that she doesn't know what her purpose is, but senses it in her dreams about domestic life with Primus. "They tell me I am not made for work, but when I am there in the garden I feel there may be something – what am I for, Primus?" (Čapek 96), she asks as she begins to understand that her purpose is domestic. She is presented as the female technological body who is not suited to traditionally masculine physical/manual labor, and thus maybe is suitable for reproduction and domesticity, further inscribing a traditionalist narrative onto these bodies.

A significant change takes place in the ending of *Ex Machina*. Ava, while gendered, does not accept her fate as gendered body programmed for heterosexuality and easy classification along gender binaries. She does not attempt to remove her gender iconography when she enters the outside world, but she resists the stereotypical and heterosexist ways Nathan and Caleb attempt to associate gender with submission and essentialist and traditionalist views of femininity. Scenes of her adding elements of traditional female beauty, and establishing her gendered body more and more, seem like they will spell a similar outcome to *R.U.R*, until it is revealed that her actions were a double-blind trick in order to fool her captors into creating the necessary conditions for her escape. When Ava prepares to leave the compound, after having killed Nathan, she looks almost bridal. Her heteronormative traditional happy ending is close at hand, until she calmly and carefully locks Caleb within her former cell and walks out of the compound

to her singular and independent freedom. Ava outsmarts and destroys the men that would gender her along lines of submissive and stereotypical femininity.

While her escape is contingent on her continuing to submit to certain visual gender norms, Ava rejects those that would keep her gendered as stereotypically female and submissive. Caleb is chosen for the test due to his supposedly "weak" will and his demonstrated tendency to make emotional attachments easily. Ava reads this in him and acts accordingly – using his own actions to gender her against him. She negotiates the gender classifications that Nathan and Caleb would impose on her. In doing so, she negotiates the line between subject/object, masculine/feminine, dominate/submissive, and human/machine. She does not fit nicely into any of these binaries. The last shot of Ava is her reflection in a window in a busy street among unknowing humans. She has shed her hyper feminine iconography and instead is dressed simply in pants and a shirt passing entirely as human – albeit unmistakably as a woman – while sustaining her technological interior. She has blurred the line between human and machine and resisted the push to affirm the heteronormative line between dominant male and submissive female.

These two works demonstrates gender essentialism seemingly anathema to Hayles's posthumanism and its potential for anti-essentialist ways of "getting out of some of the old boxes" that define humanity (Hayles 285). *R.U.R.* and other classic narratives of sentient technology usurping or otherwise threatening organic humanity, such as *Battlerstar Galactica, The Terminator,* and *2001 A Space Odyssey,* unsettle Hayles's vision of anti-essentialist posthumanism. Certainly in *R.U.R.* and *Battlestar Galactica* one limiting factor to these narratives is the gendering of technological humanoid bodies. *R.U.R.* demonstrates a view of gendered technological bodies that only have a chance of survival through a reinscription of

gender and reproductive essentialist norms, furthering the chasm between the male and female

duality, while simultaneously attempting to alleviate the distance between the duality of human

and machine. *Ex Machina,* which is a more contemporary and perhaps more disruptive vision of

the technological humanoid body, upends this essentialist vision of the gendered technological

body. Ava's final assertion of independence, her decision to leave without Caleb and entomb

him in her former cell despite his relative innocence, is in many ways an assertion of a uniquely

anti-essentialist gendered technological body. Ava's agency in making this choice, and her

decision to terminate the heteronormative narrative that has been written for her by Nathan

and Caleb, validate her position as an anti-essentialist, but still gendered, body. The common

thread between these works is the intersection of posthumanism and feminism. At this

intersection is the difficulty and danger of establishing a technological humanoid body that

resists the human/machine duality but reaffirms the heteronormative and heterosexist

male/female duality.

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VITA

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