Android Women and the Body Electric:

Sex and gender in the post-human worlds of film

Iona Bruce

Humanities

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Committee:

Thesis Advisor: Dr. Annjeanette Wiese, Department of Humanities

Dr. Paul Gordon, Department of Humanities

Dr. Katherine Eggert, Department of English

Abstract

As the technology behind androids, sex-bots, and other forms of gendered artificial intelligence develops rapidly, it becomes ever more important to investigate the ways in which culture imagines the narratives of feminized androids in order to unpack the gendered logic of their aesthetics and narratives. Using the representations of android women in the films *Ex Machina* (2015), *Ghost in the Shell* (2017), and *Blade Runner 2049* (2017), this paper will explore the ethics and implications of how femininity manifests in android women, and how their post-human artificiality puts pressure on traditional separations between gender and sex. Utilizing the work of theorists such as Simone de Beauvoir, Donna Haraway, Judith Butler, and Laura Mulvey, this paper will explore the ways in which androids have a revolutionary potential to reveal the culturally constructed origins of sex and gender. On the other hand, the sexualized and gender-stereotypic narratives, bodies, and representations of android women in these films point towards a culture with deeply restrictive conceptions of femininity. The overwhelmingly male control of android women within these films makes these restrictions and representations particularly problematic. Considering the structural male domination of both the film and robotics industries, the problem of the male gaze controlling the bodies, narratives, and representations of android women has real-world applicability. An attention to this control of android women also has the potential to reveal the ways in which this control is held over real women. Even while some of these films might be variably self-aware of this misogynistic content, and use their narratives to frame it critically, the ultimate lack of any android women outside male control or strict gender binaries fails to imagine any alternative possibilities and restricts our culture's imagination of the future.

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Section 1: Introduction

In Denis Villaneuve's new *Blade Runner* reboot, there is a scene in which Niander Wallace, the new inheritor of the Tyrell Corporation, kills a female synthetic replicant. The scene opens with Niander clutching the head of the crumpled and gasping naked replicant, almost in a benediction. Another replicant, Luv, clothed in a polished white dress, stands stock still behind him, rage and fear warring on her face as the man unsheathes the knife in his hand and grabs the first replicant's naked abdomen. The camera takes his perspective, assessing up and down her naked body before he finally cuts open her abdomen, kisses her, and turns, leaving her to crumple to the ground.

This scene is viscerally shocking – the threat of rape, the subjugation of women both physically and psychologically, the objectification of the female body, and the gendered nature of this violence seem stark when stripped of their context. Yet scenes like this one from *Blade Runner 2049*, with their visual emphasis on masculine control and subjugation of naked female bodies, are not uncommon in the genre of science fiction film centering on android women. The three films *Ex Machina* (2015), *Ghost in the Shell* (2017), and *Blade Runner 2049* (2017) all represent contemporary major Hollywood releases featuring narratives in which android women are created, controlled, sexualized, and subjected to violence by men. The bodies of these android women and how they are represented in these films carry specific ramifications for contemporary gender politics but also larger implications about the effect of the post-human on the future of gender and sex in the human species.

This paper will begin by situating these broad concerns into a framework of feminist authors such as Simone de Beauvoir, Donna Haraway, and Judith Butler. Direct analysis of these

films will then be organized thematically, focusing first on the design aesthetics of these android women and their placement under Laura Mulvey's theory of the male gaze, before moving on to narrative themes such as the way in which android women's bodies are represented as inanimate aesthetic features for the environments of men. Considering this troubling content, a central question is posed as to whether these narratives are self-aware and critical of this content, successfully problematizing dystopian societies, or merely replicating these disturbing tropes. These findings are relevant to a final larger discussion of how science fiction portrayals of gender and sex in androids are relevant to real-world male control over the production of robotics and film, and how biased representation in these industries might lead to equally unbalanced social and cultural configurations for society.

Section 2: Why Android Women?

Before the task of analysis, it is worth clarifying what is meant by this terminology. What is implicit in "android women" that is different than "female androids"? "Female" certainly lends acknowledgement to the material difference of these android bodies while retaining the alienating quality of the non-human. The female/male dichotomy denotes a division of sex that reaches into the non-human realms of biota. We speak of female plant parts, female insects, female mammals, and even of female aliens and monsters.[1] To use "female" in reference to androids captures the non-human status of robots in our culture and within the narratives of these

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[1] Notice the way in which "female werewolves" sounds correct whereas "female humans" sounds like a chatbot's failure to pass the Turing test. Even with the prefix of humanity, saying "human females" as opposed to "human women" sounds profoundly dehumanizing. This is not to preclude the existence of "werewolf women", but the emphasis is decidedly different, presupposing a human-like society and social roles.

films. Human women are usually described as female in a clinical setting, where there is an emphasis on the biological and material qualities of bodies that separate them from the male.

To be described as a woman, however, has cultural implications that go beyond the biological scope of the female sex. As Simone de Beauvoir notes in *The Second Sex,* "Everyone agrees there are females in the human species; today, as in the past, they make up about half of humanity; and yet […] we are urged, 'Be women, stay women, become women.'"[2] She recognizes that to be categorized by culture as a woman requires entrance and maintenance through prescribed behavior, matching some culturally determined image of womanhood. The biological category of "female," however, has no such constraints. Thus, in a traditional understanding, a division between sex and gender opens when the biological nature of sex precedes the culturally constructed role of gender. So while females of the human species can achieve the gender role of woman in human society, there is no guarantee android females can achieve the same. Considering that the category of "woman" has not even been bestowed upon every human female, with society's alienation and othering of androids it seems unlikely they would be able to achieve this cultural role. Traditionally the role of "woman" communicates humanity through the gendered nature of our social selves.

Yet this is where the post-human puts pressure on the Beauvoirean division[3] between the materiality of biological sex and the cultural construction of gender. Androids made in our image

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[2] Simone De Beauvoir, *The Second Sex*. Translated by Constance Borde and Sheila Malovaney-Chevallier. 1st ed. (NY: Vintage Books, 2010), 23.

[3] For a full analysis of how Beauvoir presents this division, see Judith Butler, "Sex and Gender in Simone de Beauvoir's Second Sex," *Yale French Studies*, no. 72 (1986): 34-49.

may have our secondary sexual characteristics,[4] yet have no biological context for these features. Android women lack the biological need for mammary glands or a wider pelvis for childbirth and yet almost all of them are created with prominent breasts, small waists, and wide hips. Android men lack the hormones to square their jaw, differentiate their muscle tone from android women or lower their voices, and yet these features are almost always present. Even if humans design androids with the primary sexual organs allowing reproduction, these are design decisions, constructions flowing from economic, political, or imaginative sources in science fiction and also science. The logic stemming from the Greek roots of android, "man" and "form," suggest an origin along these lines; a form in the image of man is, in a sense, a consequence of man. We lack knowledge of any other sentient beings outside of fiction with the cultural concepts necessary to create an image with the form of man, so when we see that form it is an instant marker of a human maker. To see an android is therefore usually to assume a man-made product of technology and culture. So if the division between sex and gender is a matter of natural or cultural construction, then androids are necessarily all gender.

"Woman," however, can also broaden our discussion beyond individual practices and bodies of women to the full schema of what "woman" means in our culture. Invoking Beauvoir also recalls the idea of the "Eternal Feminine," which Beauvoir argues is held like a Platonic ideal - a static, normative ideal to which women are taught to aspire, regardless of difficulties squaring this ideal with the realities of their lives. She writes that, "to the dispersed, contingent, and multiple existence of women, mythic thinking opposes the Eternal Feminine, unique and fixed; if the definition given is contradicted by the behavior of real flesh-and-blood women, it is

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[4] Primary sexual characteristics are sexually dimorphic features present at birth, which in humans consist of the reproductive organs such as ovaries and testes. Secondary sexual characteristics, on the other hand, are the sexually dimorphic features that develop during puberty such as breasts in women and facial hair in men.

women who are wrong: it is said not that Femininity is an entity but that women are not feminine."[5] This Feminine Ideal helps tie together the disparate cultural practices and aesthetics that create the gender role of "woman". It operates on the level of behavior, governing how women should act, but also bleeds into appearance. Ideal female bodies are celebrated by culture in magazines, television, and advertising full of white models with long legs, thin waists, curvy hips, and prominent breasts. Bodies that don't approximate these beauty standards because of their color, weight, disability, or other failures to conform to this ideal are marginalized. Considering the way in which the main android women in these films all conform heavily to these standards, it's useful to be able to talk about how all these individual characters might be placed into a larger concept of the android woman in our culture. Moreover, without any biologically sexed foundation for their gender, android women are only culturally intelligible as women because they have been designed to align with this feminine ideal. It is worth mentioning, however, that while the bodies of android women are uniquely positioned to meet this ideal, even they will never entirely embody it. The Feminine Ideal is inherently full of contradictions: idealizing the purity of virginity while glorifying motherhood, creating woman's ideal position as a loyal half of heterosexual monogamous pair while emphasizing her sexual availability to men, insisting the perfection of her appearance while castigating vanity… these demands stretch into oblivion. Like Plato's ideals, the Eternal Feminine can only exist wholly on the conceptual plane, above the necessities of the material.

I have chosen to use "android women" over "female androids" largely to draw attention to these distinctions. Androids are perhaps singular in that even their bodies are constructed in

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[5] Simone De Beauvoir, *The Second Sex*. Translated by Constance Borde and Sheila Malovaney-Chevallier. 1st ed. (NY: Vintage Books, 2010), 266.

accordance with gender roles as opposed to biological sex. If "woman" describes a gender role to be achieved, it would seem odd if androids designed specifically to look like and often perform service tasks traditionally appropriate to women did not achieve at least part of this distinction. Of course, with the alienation and othering of androids in the films under consideration here, these connections are not acknowledged within their respective story-worlds, but my analysis does not support the dystopian worldview of these fictional societies. Moreover, my project is to emphasize the connections between the treatment of human and android women. Because the androids of these films are portrayed by human actors and have the form of human women, as an audience we respond to these androids as if they were human women. Not only do we see the bodies of androids in these films as the bodies of women, but also their narratives of objectification, abuse, commodification, and even sexual slavery pick up on aspects of social violence that are overwhelmingly perpetrated against women. Indeed, these connections are what make android women so powerful as a subject of study. Like most science fiction tropes, while androids are part of an imagined future, they simultaneously question our present by pushing contemporary technological and social developments to their logical extremes. My interest is in the implications these android narratives bear for women today, and for the future of gendered bodies.

Section 3: Breakdowns in Binary

The idea that imagery and narratives about robots could reflect a model for gender and even sex in culture is not entirely original. Donna Haraway's famous 1984 "Cyborg Manifesto" sets crucial groundwork in imagining the cyborg transforming sex and gender as part of a larger

metaphor for contemporary transformations of social, political, and technological relations.[6] The hybridity of the cyborg, the unity of its parts, and the way it spans boundaries between organic and nonorganic, human and nonhuman, technology and biology, creates a metaphor of unity without totalization that Haraway argues has the potential to break down the dichotomies of the Western tradition. In this framework, the binaries of sex, gender, and their relations are part of this "maze of dualisms in which we have explained our bodies and our tools to ourselves."[7] Haraway points to the way in which feminist narratives have shown cyborgs transgressing these boundaries and exploring fulfilling existence outside of those dualisms of male/female, human/non-human, organic/technological, etc. She argues that these cyborg narratives, exploring life outside of Western cultural dichotomies, should serve as a superior model for encompassing the diversity of experience and embodiment.

This vision of the inclusion of technology in the human body diversifying the way gender and sex are expressed in culture is profoundly optimistic. Haraway imagines a future in which cyborgs "might consider more seriously the partial, fluid, sometimes aspect of sex and sexual embodiment" and gender "might not be a global identity, even if it has profound historical breadth and depth."[8] Yet, after thirty years of rapid technological development and fusion into the body, Haraway's vision remains largely unfulfilled. Gender and sexual binaries remain fundamental parts of society and, as we see in the sexing and gendering of androids, a fundamental part of how our culture imagines the future. While in the 1980s Haraway envisioned

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[6] Donna Harraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." In *Simians, Cyborgs and Women: The Reinvention of Nature*, (New York: Routledge, 1991), 149-81.

[7] Ibid., 181.

[8] Ibid., 180.

the transgressive potential of technology to break down the binaries of culture, current scholarship is becoming increasingly aware of ways in which algorithmic and technological integration into everyday life reproduces, amplifies, and solidifies existing cultural biases.[9]

With this adjusted contemporary perspective, it is crucial to acknowledge the ways in which technology is limited by the culture in which it is created. However, this doesn't preclude Haraway's point that technological integration and fusion with the body *could* serve as a revolutionary model for social change. Like most manifestos, Haraway's work focused more on the potential of a post-revolutionary future than the painstaking process of overcoming obstacles to that end point, but this does not mean that these obstacles cannot be overcome. Technology created with cultural awareness and goals similar to those of Haraway's could be a first step down that path.

I share Haraway's conviction that new technological configurations of the body have a radical potential to break down cultural binaries, particularly in the aspects of sex and gender. But where Haraway sees her cyborg revolution in the joining of the organic human body with technologically constructed parts, I see the total artificiality of the android as potentially revolutionary. The android's removal from any natural/biological origin, its total

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[9] See the following for a variety of contemporary examples of this issue:

Hannah Devlin, "AI Programs Exhibit Racial and Gender Biases, Research Reveals," *The Guardian*, April 13, 2017, accessed April 30, 2018, https://www.theguardian.com/technology/2017/apr/13/ai-programs-exhibit-racist-and-sexist-biases-research-reveals

Parmy Olson, "Racist, Sexist AI Could Be A Bigger Problem Than Lost Jobs," Forbes, February 26, 2018, accessed April 30, 2018, https://www.forbes.com/sites/parmyolson/2018/02/26/artificial-intelligence-ai-bias-google/#2c4f68541a01

Parmy Olson, "The Algorithm That Helped Google Translate Become Sexist," *Forbes*, February 15, 2018, accessed April 30, 2018, https://www.forbes.com/sites/parmyolson/2018/02/15/the-algorithm-that-helped-google-translate-become-sexist/#29ae4e2c7daa

constructedness, has the potential to reveal the mythic quality of our own "natural" origins and serve as a metaphor for human social change.

Section 4: "Natural Facts"

Written in the decade after Haraway's "Cyborg Manifesto," Judith Butler's *Gender Trouble: Feminism and the Subversion of Identity* and *Bodies That Matter: On the Discursive Limits of Sex* provide a less aspirational and more analytic framework through which the embodiment of sex and gender might be interpreted. Where Beauvoir set the tone of feminist theory by troubling gender in contrast to sex, Butler moves past this division to question the premises on which both categories are based. Butler writes that the Beauvoirean argument creates "the distinction between sex and gender [that] serves the argument that whatever biological intractability sex appears to have, gender is culturally constructed: hence, gender is neither the causal result of sex nor as seemingly fixed as sex."[10] For Beauvoir and her contemporaries, this distinction served its purpose of disputing sexist biological determinism. However, Butler notes that this argument neither follows this discontinuity to its logical limit – that this disruption between gender and sex means "men" will not accrue exclusively to the bodies of males or that "women" will not do the same for the bodies of females – nor does it really interrogate the "fixed" nature of sex. Instead she argues that "female" is as unstable a concept as "woman" and that both terms have been constructed in opposition to the concepts of "male" and "man."[11] Butler does not make it explicit in this paragraph, but as her argument

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[10] Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity* (New York, NY: Routledge, 1990), 6.

[11] Ibid., ix.

develops, it becomes clear that she, like Haraway, questions this relationality as it has been constructed from the artificial binary categories of sex and gender.

This artificiality, as Butler notes, does not occur within the "binary that counterposes the 'real' and the 'authentic' as oppositional," but rather "that certain cultural configurations of gender take the place of 'the real' and consolidate and augment their hegemony through that felicitous self-naturalization." [12] What Butler takes issue with is the way in which sex is taken as an unquestioned, self-evident, and entirely biological binary upon which the whole system of gendered binarism rests. She asks in the preface to *Gender Trouble*:

> Does being female constitute a 'natural fact' or a cultural performance, or is "naturalness" constituted through discursively constrained performative acts that produce the body through and within the categories of sex? […] What other foundational categories of identity – the binary of sex, gender, and the body – can be shown as productions that create the effect of the natural, the original, and the inevitable?[13]

These questions outline Butler's skepticism to the invocation of biology as an indisputable and natural foundation for categories of identity. To Butler, the biological explanation takes on qualities of the unquestioned creation myth, both narrating how categories came to be and suggesting that they should remain static within the "natural order" of things.

In *Bodies That Matter*, Butler expands on these categories and describes how cultural discourse creates "biological" categories like that of race which emerged from a history of

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[12] Ibid., 32-33.

[13] Ibid., viii.

racism rather than any objective genetic reality.[14] Instead of looking for origins outside of

culture, Butler suggests the use of Foucauldian analysis of identity categories. She argues that the

categorization of bodies and identities into sex, gender, race, and sexuality leads to the

manifestation of these categories through the ritualized repetition of norms. These regulatory

ideals – of which the Feminine Ideal is a part – require and reinforce each other with such

ubiquity that these categories and their corollaries of racism, misogyny, and homophobia appear

to those within our culture as both natural and eternal. This seemingly "backwards" continuity,

tracing a flow from the substantializing of bodies along racial, gendered, and sexual lines to the

creation of a mythic natural origin point, seems paramount to explaining the bodies of androids

which, despite lacking natural origins, still manifest along lines of sex, gender and race.

    Gender Trouble and *Bodies That Matter* are useful theoretical frameworks for

understanding the sexed bodies of androids, but android bodies are equally useful for grounding

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[14] Judith Butler, *Bodies That Matter: On the Discursive Limits of "Sex"* (New York, NY: Routledge, 2011).

While modest human genetic variation between human populations does exist, these populations usually fail to fall into historically conceived racial categories. For example, the genetic diversity in Africa is so high that Africans on average are slightly more genetically distinct from each other than they are from Eurasian populations. Traits like skin color, which have traditionally been used to define races in humans fail to reflect genetic differentiation or history in any meaningful way. The following studies demonstrate a tiny fraction of this research:

A.R. Templeton, "Biological Races in Humans," *Studies in History and Philosophy of Science* 44, no. 3 (September 2013): doi:10.1016/j.shpsc.2013.04.010

D.J. Witherspoon et al., "Genetic Similarities Within and Between Human Populations," *Genetics* 176, no. 1 (May 2007): doi:10.1534/genetics.106.067355.

Ning Yu et al., "Larger Genetic Differences Within Africans Than Between Africans and Eurasians," *Genetics* 161, no. 1 (May 1, 2002): http://www.genetics.org/content/161/1/269.

this high theory in the material. Butler is often criticized for how her entirely discursively created subject leaves little option for the agency of individuals or the praxis of resistance. How can we escape the Feminine Ideal if no "I" exists before our interaction with it? Butler criticizes metanarratives of the "inevitable" but within this framework, the powerful work of sexist, homophobic, or racist discourse seems in this context as if it must ultimately define who we are. Butler offers some space for agency in "denaturalizing the natural" through acts of parody like drag performance to reveal the performativity of gender, but this is only one facet to a practical reframing of gender/sex discourse. How might we achieve the "radical proliferation of gender"[15] that displaces gender norms? Or, as Butler herself asks as the final question of *Gender Trouble,* "What other local strategies for engaging the 'unnatural' might lead to the denaturalization of gender as such?" The next section of this thesis attempts to give one possible answer to this question by utilizing the android body as model for a new understanding of the sexed body.

Section 5: The Android Manifesto

Androids embody what Judith Butler might call the instability of sex as biological concept, because what would traditionally be considered sexual aspects of android bodies are products of cultural decisions instead of biology. Without the schema of a biological sex driving their manifestation, the bodily aspects of an android's sex are not inherently linked. For example, giving an android woman prominent breasts and widened hips involves separate decisions about how to make those features, whereas in biology they usually jointly develop in the presence of

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[15] Butler, Judith. *Gender Trouble: Feminism and the Subversion of Identity*. (New York, NY: Routledge, 1990), 148.

estradiol, a female sex hormone. In an android there is no essential cause for these features'

presence together except for a constructed image of what a feminine body should look like.

Without the connective tissue between features created by a binary schema of biological sex, the

android body fractures. Each individual feature may fall somewhere on a spectrum[16] of

masculine and feminine, but there is no ultimate determining feature to an android body that

decides whether it should qualify as female or male.

This is quite unlike the model that is usually associated with binary sex determination and

differentiation in humans. The dogma typically taught about biological sex is a causal chain of

events in which DNA differences in sex chromosomes lead to binary sex determination in the

gonads and hormonal production, which in turn causes the development of secondary sexual

characteristics at puberty and fundamental differences in the brain that drive sex-specific

behaviors. Unlike the android, this traditional understanding of sex is a unified model of what it

means to be male or female. Although all the features contribute to masculinity or femininity,

because they are linked by fundamental and binary genetic origins, in this model each feature

individually is linked to every other feature and should be capable of signaling whether that body

is genetically male or female.

However, this view of biology is one that has been constructed on the basis that only

binary options for sex should exist and be acknowledged in our models for sex determination and

differentiation. The simplification and unification of this classification into this causal chain of

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[16] Even spectrum may be a troubled term here, with its implications that gender and sex manifest only in the
graduated space between two polar opposites. This plays into a conceptualization of gender and sex that are defined
by two unobtainable masculine and feminine "ideal" states, unreflected by real bodies. It also pits masculine and
feminine, male and female, as antagonistic opposites rather than the congruent variations that our mostly shared
biology and humanity would support. Here I use "spectrum" while setting up a narrative of biological binarism that I
will then work to undo, but it's worth drawing attention to these problematic implications early on. Perhaps a
conceptualization of a "matrix" of gender might escape some of these problems, but remains difficult to speak
clearly about in our language which has been so thoroughly shaped by the binaries which we seek to escape.

events is specious because it downplays the diversity of the human species and ignores the many

real bodies that refuse to conform to this model. Even at the genetic core of sex determination,

binary distinctions have never been the only option. While XX and XY sex chromosomes are

most common, X, Y, XXX, XXY, XYY and more combinations of sex chromosomes are all well

documented variants.[17] Sometimes sections of X chromosomes or Y chromosomes may even

translocate to one another, leaving individuals with XX or XY chromosomes with sections of

DNA that do not match these chromosomes. Individual genes important in the development of

primary or secondary sexual characteristics may also be deleted or altered in ways that change

the course of sexual development. Combine these vagaries with the potential for alteration in

gene expression and developmental pathways, and almost infinite possibilities occur for sex-

differentiated parts of the body to present in non-binary combinations.[18]

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[17] Clair Ainsworth, "Sex Redefined," Nature 518, no. 7539 (February 19, 2015): doi:10.1038/518288a

[18] Ibid.

Although chromosomal variations like Turner syndrome (X), Klinefelter syndrome (XXY), or Jacob's syndrome (XYY) are less known due to their relative rarity, more inclusive definitions of Differences/Disorders of Sexual development suggest that the rate of DSDs in the general population is around 1%. For comparison, the rate of red hair in the general population is generally thought to be in between 1-2%. Rather than just working on the level of chromosomes, DSDs can also occur in the genetic mutation of a single enzyme in a hormonal pathway like 5-alpha-reductase deficiency, which leaves XY individuals with female external genitalia and appearance until puberty at which point male secondary sexual characteristics develop. Receptivity of cells to hormones may also be a factor, such as in Complete Androgen Insensitivity Syndrome. The cells of individuals with CAIS fail to respond to androgens (male hormones), leaving XY individuals phenotypically female. Like many DSDs, however, CAIS can appear in mild and partial forms, which can go undiagnosed due to lack of noticeable effects on external genitalia. This is a major problem with diagnosing DSDs, as they may only become apparent during unrelated medical procedures. In "Sex Redefined" geneticist Paul James discusses a woman in Australia with a type of undiagnosed chimaerism, who came in for an amniocentesis for her third child but discovered that substantial parts of her body were chromosomally male. Incidents like these suggest that while cases of DSDs are not widely recognized on a cultural level, many people may be living with internal non-binary organs or tissue without their knowledge. On a milder and more widespread level, geneticists are finding increasing evidence of cellular exchange between mothers and their sons, meaning chromosomally male stem cells cross the placenta into the mother's body, migrate across her tissues, and potentially stay there until the mother's death. The effects of this crossover are largely unknown, but chromosomally XX and XY cells have been observed in mice to respond differently on a molecular level. The combination of all this research demonstrates the ways in which sex does not necessarily manifest in a binary from the level of individuals, organs, tissues, or even cells. All of these variations deeply question the validity of the idea that sexual binarism stems from a biological binary origin at the chromosomal level.

In this more complex and comprehensive understanding of biological variations, a unified and binary theory of biological sex again begins to fracture. The view that these variations are necessarily always disorders or abnormalities that contrast "normal" human sexual development is an outdated one. In medical practice, many individuals with ambiguous genitalia or ambiguous sex characteristics exist, but previously were "corrected" in order to fit into the dominant binary model of sex.[19] Increasing opponents of this practice note that these "corrections" usually aren't done for any sound medical reason but instead because of the prevailing cultural belief that sex should manifest clearly and within a dichotomy of male/female. Genderqueer and transgender individuals seeking elective surgeries and hormone replacement therapy also disrupt the typical model in which genetics should always link to physical features of sex. Their individual bodily alterations break down the idea that features with different levels of masculinity and femininity can't exist on the same body. Moreover, changes to the features of their sex also stem from their gender identity, and not the other way around, breaking the typical progression in which gender is seen as a natural corollary to biological sex.

The new picture of sex that emerges increasingly mirrors the model provided by androids. Primary and secondary sexual characteristics are not always inherently linked to some larger biological category of male or female. As in androids, they can interact variably and individually with what we would typically describe as masculine or feminine, and potentially even reflect new configurations outside of this dichotomy. Also like android bodies, the human body can intentionally be altered in ways that make genetics irrelevant. Because these aspects of biological bodies, usually categorized under the purview of sex, can be constructed and altered

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[19] Alice Dreger, *Galileo's Middle Finger: Heretics, Activists, and One Scholar's Search for Justice* (New York, NY: Penguin Group, 2015). Dreger provides insight not only into intersex activism but also into a deep discussion of the ethics of medically "corrective" intervention for children born with ambiguous genitalia.

more like aspects of gender, the strict divide between sex and gender in humans begins to break down as it does in androids. Androids, because of their artificiality, their culturally (instead of biologically) constructed bodies, confuse the dichotomy between sex and gender in ways that are becoming increasingly familiar in discourse about human bodies. Beginning to develop a language to describe the embodiment of androids in this new model of malleable and heterogeneous sex will help us to describe our own bodies in ways that break down the binary norms of sex and gender. As AI and android technology become increasingly prevalent in our culture, I also believe there is potential for increasing interrogation of what intelligence and embodied life could look like in bodies that flout these norms. However, where we have the ability to create androids that can break down the destructive binaries of our culture, we also have the potential to engineer bodies (and through them a society) where these binaries are even more deeply entrenched. As I will explore throughout the next sections, how we currently imagine androids, and particularly android women, has deeply concerning implications for the future of sexed and gendered bodies in our culture.

Section 6: *Blade Runner 2049* and Bodies Made to Be Looked At

Let us return to the scene from *Blade Runner 2049* that began my discussion of android women and the treatment of their bodies. In it, the founder of the Wallace corporation, and the main creator of synthetic "replicants," Niander Wallace, contemplates a naked replicant woman before stabbing her with a knife, kissing her, and leaving her to die. While the violence against the replicant woman is awful to watch in this scene, with the way the scene is set up it is actually the weight of Niander Wallace's gaze upon the replicant woman that is the most deeply upsetting

and unnerving part of this sequence. The violence comes at the very end of the scene, but before Niander stabs the replicant, several minutes pass with Niander's gaze upon her where that violence feels implied. The effect of Niander's barracuda-like seeing drones hovering predatorily around both replicant women is evidently horrifying for both the women and deeply uncomfortable for the viewer, establishing a dynamic in which Niander is framed as a predator and perpetrator of violence whereas the replicants exist as prey waiting in fear to see if they will be consumed. His gaze is therefore presented as a sign of his absolute control over their existence, and the way in which it is mingled with the violence is an integral part of this control.

The binary split of this scene along the lines of women/man, replicant/human, subordinate/dominant, passive/active, being watched/doing the watching is part of a long-standing cinematic construct that Laura Mulvey has famously described as "the male gaze". In her 1975 "Visual Pleasure and Narrative Cinema," she describes the dynamic as follows:

> In a world ordered by sexual imbalance, pleasure in looking has been split between active/male and passive/female. The determining male gaze projects its phantasy on to the female figure which is styled accordingly. In their traditional exhibitionist role women are simultaneously looked at and displayed, with their appearance coded for strong visual and erotic impact so that they can be said to connote *to-be-looked-at-ness*. […] The presence of woman is an indispensable element of spectacle in normal narrative film, yet her visual presence tends to work against the development of a story line, to freeze the flow of action in moments of erotic contemplation.[20]

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[20] Laura Mulvey, "Visual Pleasure and Narrative Cinema." In *Film Theory and Criticism: Introductory Readings*, 833-44. (NY: Oxford University Press, 1999) 837.

I quote this part of Mulvey at length because each element of the Niander and the replicants' scene matches up almost totally with Mulvey's analysis. The nakedness of the nameless replicant woman sets her up in a way that would typically code her as an erotic object, while her positioning in the center of the room in the center of the spot of light from above cement the visual propensity of the audience to examine her and her nakedness. In contrast to her pale skin and Luv's white clothing, the black clothing and positioning of Niander makes him difficult to examine and often visually presents him as a silhouette or part of the shadows of the scene.

Combined with the lighting and framing of the figures in the scene to establish this dichotomy of looking/being looked at, the camera actually takes the perspective of Niander's predatory seeing drones in long shots that linger over the naked body of the replicant woman. The audience's look is conflated with Niander's, while Luv[21] and the nameless replicant woman remain each, "the silent image of woman still tied to her place as bearer of meaning, not maker of meaning."[22] In "Visual Pleasure*"* Mulvey drew attention to the way in which the erotic contemplation of the woman usually silenced her and her ability to control the attention of the audience, while the consonance between a man's look and the camera means that a man essentially controls what the audience looks at, for how long, and how that content is visually framed. In this scene of *Blade Runner 2049*, Niander controls what is looked at by the audience, and combined with lighting and framing, controls what is salient in the scene where replicant women have none of this control. They are silent both literally and in the language of the filmic gaze. Luv speaks only briefly at the beginning of the scene and the nameless replicant woman

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[21] Luv is contrasted here to the nameless replicant woman, but a note in the script actually notes that Luv is not a proper name but a diminutive. In fact both replicant woman are nameless, emphasizing Niander's power over them, with Niander's "naming" of Luv actually reinforcing her subordinate status.

[22] Laura Mulvey, "Visual Pleasure and Narrative Cinema." In *Film Theory and Criticism: Introductory Readings*, 833-44. (NY: Oxford University Press, 1999) 834.

remains entirely silent, even as she is gutted and left on the floor. Their silence is marked in contrast to Niander's paragraphs of dialogue in which he verbally dictates his place as godhead and the replicants' status as subordinate "angels" justify and make meaning of his actions.

Finally, the way in which this scene is composed almost entirely of contemplation of the female body by the male gaze does seem to almost entirely freeze progression of the narrative just as Mulvey describes. While initially the scene seems to be primarily a demonstration of Niander's control over the replicants and an exploration of his demented views on the rights of humanity to achieve domination "on the back of a disposable work force," this does not explain the gendered dynamics of the scene. Niander wants the replicant to serve as a womb in order to more easily proliferate his workforce, but her nakedness, his unwanted kiss, and clearly sexualized assault all point towards a violent erotic contemplation of the female by the male that characterizes the scene.

Mulvey writes that the male character's gaze in film acts as a surrogate for the presumed male audience, but for audience members that find their identity reflected in the women on screen as opposed to the man who controls them, this scene feels both supremely uncomfortable and gratuitous. Under the guise of world-building and establishing the subordination of replicants, this scene of *Blade Runner 2049* seems in reality to drip with erotic contemplation of and violence against the female body while re-iterating a filmic language of the subordination of women to the control of men. However, there is added dynamic in that Niander, the human man, is not only posited as the controller of the replicant women, but also their maker. Creation is always a strong theme in android narratives, but when combined with the gendered dynamics of the male gaze, that creation narrative is imbued with an additional element of female objectification. We watch Niander engender the birth of the nameless replicant women, and

minutes later we watch him cause her death; the time in between was spent entirely in the mode of erotic contemplation of her existence. The embedded logic we are left with is that Niander created a woman with the direct purpose of her erotic contemplation. She was created to be looked at.

With the male creation of android women, pre-existent women's bodies are no longer merely presented as an image to bear the look of men, but actually engineered from inception for that purpose. This is a defining concept for the following sections of analysis, but also a daunting prospect for the future of technology and society. While men have always created the images of women for erotic contemplation in art and media, the entrenchment of this practice in AI and robotics offers new hurdles. Women pre-existent to their presentation as objects of erotic contemplation may push back against their presentation as such, but men tailoring women's existence to their own satisfaction from their creation seems to strip away the possibility for this agency. In scenes like this with Niander, men demonstrate an absolute dominion over the bodies and existence of women that fulfills a male power fantasy worryingly close to the near-future capabilities of AI and robotics.

Section 7: Only Men at the Table – A Critique of *Ghost in the Shell*

The objectifying and controlling gaze of these men is also demonstrated through a more literal visual trope, where the bodies and body parts of android women are reduced to mere decorative elements, dolls and models, fueling an aesthetic of female objectification that suffuses these films. The scene in *Blade Runner 2049* that utilizes this trope is perhaps the only instance in which *Blade Runner 2049* shows a touch less blatant misogyny than the other films under

consideration, as the only scene in which the lifeless bodies of replicants are shown as interior design elements utilizes both male and female bodies to achieve symmetry.[23] However, the way these bodies float inanimately, as mere objects to model the power and achievement of their male creator, gives a presage of the macabre female bodies present as design elements both *Ghost in the Shell* and *Ex Machina.*

Before I begin this analysis, it is worth noting that many elements in this sequence are sourced from the 1995 Japanese animation, *Ghost in the Shell*, which itself is based on the 1989 manga by Masamune Shirow. However, there are enough differences between the Japanese animation and the American live action that I believe it is fair to evaluate the remake solely on its own content. Moreover, I don't believe that copying content from an earlier source shields this content from contemporary critique, however iconic that original source material happens to be. Remakes have the potential to problematize the source material as well as replicate it, and considering how many liberties were taken with the original *Ghost in the Shell* plotlines, it is not too much to consider that contemporary filmmakers could have interrogated some of the more problematic elements. In fact, it is interesting to note that in the animation Major's character and relative agency is established prior to the opening sequence, while the manga doesn't even reference these images in its opening.

Ghost in the Shell's opening sequence demonstrates perfectly both Laura Mulvey's male gaze in action and also the literal objectification of the bodies of android women, with both of these functions transforming the body of an android woman into an inanimate aesthetic object for contemplation. In this opening sequence, we see the assemblage of the body of the main

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[23] Although this scene at 32:58 is the only one in which the real bodies of replicants are used as aesthetic design elements, holographic women and statues of women's naked bodies used as advertisements are rife throughout the film. Though related, these instances will analyzed in a later section.

character, Major. Beginning with the connection of underlying structures of her body in a seemingly underwater environment, Major goes through several layers of liquid that add to the dimension but also sexualization of her body. As opposed to the dark, cold colors of the water and the clearly metallic and plastic muscles and structures of Major's body, as her body enters a red liquid, Major's body gains the soft tissue and curves of a conventionally attractive woman. Moreover, the minute her body has added these elements necessary for erotic contemplation, the images of her body change from oblique angles and close ups to full silhouettes of her nakedness. As soon as her body becomes erotically intelligible to a presumably straight male audience, it is presented in a way that encourages this erotic contemplation. These full body shots continue as Major floats up through a white goo that drips suggestively from her body, then peals away to reveal her naked skin and silhouette, only just covering enough to retain the movie's PG-13 rating. Much like the bodies in vats in *Blade Runner 2049,* Major's body is floating unanimated and unaware, making the contemplation of her as an object, rather than a character or person, the main visual goal of these images. Within this context of inanimation, the whiteness of Major's skin along with the lines etched along her skin are more than reminiscent of a model or doll, a visual trope that becomes a touchstone for the rest of the film.

This opening scene in which Major's body is presented as a pale naked object for male contemplation is visually referred to throughout the film, even as she grows as a character with goals and motivations that end up at odds with male authority figures. Naked models and doll-like figures of Major's and other android women's bodies appear in the background throughout the film, usually situated in the labs of Hanka Robotics, the company responsible for the insertion of Major's "ghost" into a fully synthetic android body. At 21:40 a reclined semi-transparent model of what is presumably Major's body appears behind her as work is done on

Major's body while at 23:55 behind the partially deconstructed Hanka companion bot is a line of white skinned naked female bodies, presumably of other Hanka companion bots. The white skin of these companion bots also mirrors the motif established by the scene of Major's body covered in white liquid in the opening sequence. Between these doll-like models, silent bodies, and the holographic advertisements of women that suffuse the film, images of real women blur with women-as-objects, leaving the two often almost indistinguishable in their lack of agency.[24]

Particularly blatant is a scene later in the film[25] in which Cutter, the CEO of Hanka Robotics, contemplates Major's sedated body through a glass divide and then orders his chief engineer to terminate Major. Silhouetted in the window is a semi-transparent model of what is presumably Major's body, while on the desk in front of Cutter is another pale white model of a naked female body, also encased in glass. The structural components of the transparent model are visually reminiscent of Major's body in the dark water in the opening sequence while the smooth white finish of the encased model has almost the exact look of Major's body as it ascended from the thick white liquid seconds later. The way in which these objects mirror the aesthetics of Major's body in the opening sequence compounds a direct connection between her and them. Both existence of her and the models was facilitated, if not ordered into being, by the male CEO of Hanka robotics, and at this moment in the film Major's position is exactly like those of these models. In her sedated, inanimate state she functions as a static doll to be contemplated, manipulated, and ultimately discarded by the man who controls her. This is particularly striking given her status as the protagonist of *Ghost in the Shell*; despite being the

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[24] Holograms of women will be analyzed in a later section focusing on *Blade Runner 2049*, but it is worth mentioning here that in holographic advertising, women are the only ones in this film that are sexualized, with giant naked women appearing in the background of the cityscape (8:10), and holographic dancing female strippers appearing in the club scene (28:47).

[25] 01:09:05

most developed and active character in the film, she is still subject to this paralyzing masculine contemplation.

Even at Major's most animate moments, during her most spectacular fight sequences, her design still echoes the pale skinned naked doll-like qualities from the opening sequence. During these she dons a skin-tight white suit ostensibly for thermos-optical camouflage, but there is no justifiable reason why a suit with these capabilities has to leave Major as close to naked as possible while still retaining at PG-13 film rating. In fact, Major spends a vast amount of *Ghost in the Shell* either in her skin-tight white suit,[26] in a skin-tight wet-suit, undressing, partially undressed, in a nearly transparent suit, or naked with part of her musculature exposed.[27] By contrast, there are only three scenes in which male characters are depicted as anything but fully dressed, and then they only have their shirts temporarily removed.[28] There is no compelling reason or explanation for why this is the case apart from the obvious way in which it prolongs erotic contemplation of Major's naked form for the straight male viewer.

This is where the control and contemplation of android women by their male creators in the story-world blends seamlessly into the control and contemplation of android women by the male creators of their characters and character design. What is perhaps so egregiously unreflective about *Ghost in the Shell* is the way in which Cutter's masculine objectification and control of Major are clearly villainous, and yet the male director, male team of producers, and all-male screenwriting team manage to create a film in which they use the exact same tactics to control Major's image in order to enhance her role as a sexualized object of the male gaze.

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[26] See scenes at 11:30, 47:42, 01:30:26, and 01:37:36.

[27] 1:04:50, 1:07:00, 14:40, 15:13, and 35:15 respectively.

[28] Batou is briefly shirtless at 36:33 and Kuze is briefly shirtless at 56:30 and 1:29:10.

Without even stepping into the controversy of the ill-thought-out white-washing of Major's character,[29] the all-male teams of film creators seem to reproduce and amplify current gender inequalities in our culture into aesthetic male power fantasies through the medium of film.

Take, for example, one of the earliest scenes in the film, in which we are introduced to both Dr. Osmond, a Hanka engineer, and Hanka's "companion bots."[30] These android women are designed with aesthetics of Japanese geisha, stepping with small, delicate movements in an elaborate *hikizuri*[31] inspired kimono, with white face-makeup in traditional V lines down the neck, large hair pieces, painted lips, and East-Asian facial features. However, their features are also absolutely doll-like, with more of the pale skin buffed to a shined finish and construction lines like Major's initial presentation in the opening sequence. Also, unlike traditional geisha in Japan, these companion bots inhabit a Japanese-inspired space, but they don't play the geisha's role of the elite entertainer through mastery of artful conversation, performance, and the Japanese tea ceremony. Instead these android women are relegated to silent, glorified servers, their silence only emphasizing their doll-like aesthetic qualities.

It is worth taking a moment to acknowledge that an entire thesis could be written comparing the geisha inspired companion bots in *Ghost in the Shell* to the android women,

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[29] Steve Rose. "Ghost in the Shell's Whitewashing: Does Hollywood Have an Asian Problem?" *The Guardian*, March 31, 2017. Accessed October 1, 2018. https://www.theguardian.com/film/2017/mar/31/ghost-in-the-shells-whitewashing-does-hollywood-have-an-asian-problem

[30] 9:15

[31] The hikizuri is a traditional type of Japanese kimono usually only worn by dancers or geisha due to its trailing skirt that makes it impractical outside of performance, while this type of small, delicate movement is usually produced because of the difficulty of moving in heavy kimono with relatively high wooden sandals called *geta*. Considering the geisha bots' ability to suddenly extend their arms and legs and move quickly in nightmarish spider-like fashion, it seems this style of movement can only be a very deliberate emulation of Japanese geisha instead of existing for any practical reason.

Kyoko and Jade, in *Ex Machina*. Both the silent geisha bots and Kyoko, the silent android woman maid of Nathan in *Ex Machina*, are mostly relegated to the sidelines of their films, and utilized mostly as unspeaking, un-agentic aesthetic components to the environments of men. However, it is necessary to discuss how their representation is racially coded and that treatment of East-Asian coded android women in comparison to their white-bodied counterparts in these two films posits the former as more submissive, less agentic, less complex, and less evolved than the latter in both of these films. Both Kyoko and the geisha companion bots silently serve their white male creators/masters in a deeply problematic enactment of imperialist and patriarchal roles. Interestingly, despite their submissiveness, both Kyoko and the geisha bots have scenes in which their faces are removed in almost the exact same way, utilizing horror tropes to make their technological/inhuman "real" faces deeply unsetting. While parts of Ava and Major, the white-bodied android women, are removed at various points in the film, they are never subject to the same level of body-horror as Kyoko and the geisha bots, and are never framed as quite as inhuman. The bodies of Kyoko and the geisha bots are also subject to levels of on-screen violence and objectification that their white counterparts never experience. Both Ava and Major express empathy with their "less advanced" East-Asian robot counterparts, but ultimately leave them behind in order to accomplish their own goals. *Ex Machina* seems at least somewhat self-aware of the problematic elements it presents, allowing Kyoko to be the first the drive a knife into Nathan's back, and returning to linger on her fallen form multiple times with almost a sense of regret from Ava in comparison to her dispassionate contemplation of Caleb. This only paints the most cursory of sketches some of the greater problems with the representation of race in these films, and they most certainly deserve analysis through the lens of race theory as well as the gender theory that I have utilized. While I cannot accommodate such a full analysis as part of

this thesis, I would like to note the necessity of intersectional discussions of femininity and open these themes as a further topic of study.[32]

The other relevant note I would like to touch on before continuing with the analysis of women as aesthetic objects, revolves around the treatment of the geisha bots, lack of women's' agency, and sexual assault in the film. Even though Kuze, the male antagonist of Hanka Robotics, is supposed to stand in contrast to the objectifying policies of that company and for the acceptance of androids like himself as thinking, agentic beings, he manages to treat the geisha bots with even less humanity in this regard. Though the memories of a geisha bot at 26:30, we see the men grab the geisha bots against their will to the sound of female screams. Then, Kuze, the initial-villain-turned-protagonist is shown bent over the naked doll-like body of the geisha bot, ostensibly to hack her programming, but in what is clearly and uncomfortably reminiscent of rape. Yet again, an entire thesis could be written on the clear subtext of rape and sexual assault, and lack of women's bodily autonomy throughout this film. Along with this scene, at various points Major is drugged, handcuffed, or otherwise incapacitated and then subject to unwanted physical contact by men in scenes with heavy undertones of sexual assault. There are also repeated scenes in which Major gives her consent to have her mind and body digitally altered, but it is eventually revealed that this consent is and always has been meaningless. The complete

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[32] In particular, LeiLani Nishime writes a prescient analysis of the labor produced by East-Asian female bodies in science fiction in "Whitewashing Yellow Futures in *Ex Machina*, *Cloud Atlas*, and *Advantageous*: Gender Labor, and Technology in Sci-fi Film," however, I would add both a fuller exploration of the tropes above and add both *Ghost in the Shell* and *Blade Runner 2049* as additional texts to be looked at through this intersectional lens of critique. *Ghost in the Shell*, *Blade Runner 2049*, and *Ex Machina* all draw heavily from East-Asian aesthetics and source material and yet totally side-line East-Asian perspectives and characters. While *Ghost in the Shell* is the only one of the three to blatantly change the race of originally Japanese characters, not much credit can be given to *Blade Runner 2049* as despite its imagining of a multi-cultural Los Angeles, the large main cast is strikingly and overwhelmingly white. Even the setting of *Ex Machina* is heavily influenced by Japanese design aesthetics and yet the only words spoken by an East-Asian character in that film are through a recording after that character's mutilation and death. While growing awareness of white-washing in Hollywood is certainly a positive development, without a parallel interest in how East-Asian characters, particularly women, are already treated in film, increased diversity may simply lead to the greater perpetuation of these deeply problematic tropes.

disregard for both the geisha bots and Major's bodily autonomy by men in power could be examined at length as part of this discussion on the effects of objectifying android women.

This lack of women's autonomy over their own bodies and lack of agency within their world is compounded by the fact that, without fail, all the powerful figures in *Ghost in the Shell* are men. In the scene that introduces the geisha bots, the table that they serve is entirely composed of male creators and buyers of technology, discussing potential business deals. Not a single woman appears in this scene apart from the silent and suggestively named "companion bots," which have been integrated into the background as almost literal dolls, decorative elements to enhance the male businessmen's experience. The divide is only emphasized by the fact that these women are literally technological products to be bought and sold, just like the products that the businessmen are discussing at the table. A visual binary is established where men are human actors, controlling their environment, and women function as passive and aesthetically fitting features of that environment.

In fact, nowhere in the film are there any women shown pulling the levers of power. While *Ghost in the Shell* may feature two female engineers/technicians, both of these women are murdered by various men in bids for power. The fact that only men are shown in seats of power in the story-world of the film only mirrors the power dynamics of the creators behind the screen. This is why objectification through the male gaze, and tropes like the doll androids of *Ghost in the Shell* are so worrying – they are part of a self-reinforcing cycle where men come to power through a system that favors male agency and female passivity and subservience and continue to create a cultural sphere that values those traits. There is nothing to suggest that if blockbusters like *Ghost in the Shell* have millions of dollars invested in merely the image of a future in which powerful men are sold doll-like women androids, that our culture is not capable of also

reproducing those images in actuality as technology and AI evolve. And even if these android women of the future have no consciousness or awareness of their situation, if these gender dynamics are allowed to progress in this way, they will forever reinforce the objectification and subordination of actual women. Earlier I expressed my hope, in line with the logic of Judith Butler, that the development of androids would break down our current binary models of both sex and gender, and proliferate ways of being that exist both in between and outside the masculine and the feminine. However, it is necessary to remember that such developments will not take place naturally or inevitably, and especially not in a culture where the dominant system self-perpetuates its binary model *ad infinitum*. Fighting in actionable ways for the visibility and support for women, people of color, disabled and LGBT individuals, so that they can articulate their perspectives and visions of the future in our culture is paramount to changing these cultural paradigms. Otherwise our future is sure to look very much like the one in *Ghost in the Shell*, where men sit at the table to make decisions and women are relegated to the periphery, serving them.

Section 8: The Horror of Bluebeard's Gaze in *Ex Machina*

For all that *Ghost in the Shell* utilizes the trope of women's bodies turned into objects for aesthetic contemplation as part of the environment, *Ex Machina* is even more blatant, actually integrating this trope as a major plot-point in the film. Very early in the film, Caleb, who is unknowingly invited to Nathan's house in order to test his new AI, walks down a hallway with a series of masks that become progressively more human, until they end on what the viewer will

soon recognize as the face of the android, Ava.[33] This not only foreshadows a later scene where Ava will break free of her prison-like room and contemplate her own face on the wall, but also the way in which Nathan is revealed to have the bodies of multiple previous android women hanging in closet.[34] Moreover, much like in *Ghost in the Shell*, Ava's design leaves her essentially naked most of the film, with a body design that gives her curves and feminine features while leaving some of her internal organs exposed through transparent material, much in the way that Major's inner organs are exposed during the opening sequence of *Ghost in the Shell* and at various points when she is undergoing maintenance. Scenes where Ava dresses or undresses while in the confines of her room are also looked at (and in one scene explicitly eroticized)[35] through the male gazes of Nathan and Caleb, watching through ever-present surveillance. Furthermore, unlike *Ghost in the Shell*, *Ex Machina* gets its R rating from several scenes in which Kyoko and Ava appear full-frontally nude, while again, both Caleb and Nathan wear clothes throughout.

These elements, like *Ghost in the Shell*, beg the question of whether the male writer and director, Alex Garland, along with the male producers, male cinematographer, and male editor of *Ex Machina*, are merely replicating their own objectifying gaze in the male characters and aesthetics of *Ex Machina*, or whether they are aware of these dynamics in the film. To answer this question, Katie Jones wrote an excellent article titled "Bluebeardean Futures in Alex Garland's *Ex Machina*," published in *Gender Forum,* that analyzes *Ex Machina* through the lens of both Laura Mulvey's "Visual Pleasure in Narrative Cinema" and the French folktale in which

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[33] 20:50

[34] 1:28:00 and 1:11:15 respectively.

[35] 45:00

a man called Bluebeard murders his successive wives and hides their bodies in his castle. While

Jones acknowledges that Garland is reluctant to cite Mulvey directly, she also notes that he does

say that it may have influenced the film,[36] and Garland's interest in the male gaze and its violent

effects on the bodies of women is expressed through the Bluebeardean plot. I quote her here at

length as she connects Garland's interpretation of the plot and heroine with feminist retellings of

the story, in order to demonstrate how such a reading can integrate filmic techniques, feminist

theory, intertextual reference, and larger cultural critiques of patriarchal sexuality:

> In Bluebeard narratives, the abject "gruesome materiality of Male Gothic" (106) is most
>
> apparent in the room containing the dismembered bodies, echoing filmic techniques that
>
> 'dismember' or fragment the body, close-ups, for example. However, various feminist
>
> authors, critics and directors have re-interpreted the tale, focusing on the murderous style
>
> of masculinity that Bluebeard represents, and the concealed murder of women
>
> symbolically encoded within the patriarchal structure. In feminist adaptations such as
>
> Charlotte Bronte's *Jane Eyre* (1847), Angela Carter's "The Bloody Chamber" (1979),
>
> Jane Campion's *The Piano* (1993) and Catherine Breillat's *Bluebeard* (2009), the
>
> narrative is reworked so that the negative connotations of the heroine's curiosity
>
> transform into a sign of her intellect and/or autonomous desire. In this way, later
>
> characterizations of the wife's disobedience/curiosity come to represent a commitment to
>
> feminist ideals and an unwillingness to conform to traditional gender roles or be
>
> dominated by a husband. Carter specifically utilizes pornography as a theme and

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[36] Katie Jones. "Bluebeardean Futures in Alex Garland's Ex Machina (2015)." *Gender Forum; Köln*, no. 58 (2016), 2. Accessed January 30, 2018. https://colorado.idm.oclc.org/login?url=https://search.proquest.com/docview/1848 168044?accountid=14503.

references Félicien Rops' erotic art, thus taking "the latent content" of the traditional

story, which is "violently sexual" (Carter qtd. in Simpson ix), and bringing it to the fore.

Just as *Ex Machina* displays conventions of male gothic as outlined above, it also

explores the feminist concerns displayed by Carter's short story.[37]

To Jones, while Caleb initially acts as the "new wife" of (blue)bearded Nathan, Ava's

disobedience and intellectual besting of Nathan, situate her firmly as a feminist heroine of this

retelling of the Bluebeard folktale. Furthermore, she makes a point to connect the literal elements

of the story like dismemberment to the techniques and effects of the camera. This analysis

integrates with the Bluebeard narrative to problematize the use of the male gaze and the

treatment of women as objects. Jones connects various visual aspects of *Ex Machina* to feminist

retellings of the Bluebeard story, like the visual fracturing of Kyoko's body shown in the mirrors

of Nathan's room, to the use of mirrors to fracture Bluebeard's young wife into pornographic

images of a "harem" for his pleasure in Angela Carter's version.[38] This self-awareness in *Ex*

Machina of how the male gaze and objectification of women operates creates a narrative that is

somewhat critical of elements of its content. For example, as Jones notes, Caleb initially watches

Ava voyeuristically through the cameras built by Nathan, who embodies dominant masculinity

and patriarchy. As such, he participates in a particularly objectifying form of the male gaze on a

woman who has no ability to control when or how she is being looked at, let alone anything else

in her life. Yet Caleb's earlier actions are later reconstituted as problematic and complicit as

Caleb finds the evidence of the previous "wives" through similar camera footage taken and saved

by Nathan. Jones doesn't speak explicitly about the emotional impact upon the audience, but it

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[37] Ibid., 3.

[38] Ibid., 5.

follows that just as the audience participated in the male gaze, looking voyeuristically at Ava through Caleb's perspective, the film forces them to share in his horror as these techniques are turned against him and he realizes the "violently sexual" and devastating consequences of Nathan's control over android women.

While Jones's analysis is extremely useful for drawing formal and theoretical connections between feminist theory and the techniques of the film, this lack of emphasis on viewer response seems to lead her to eschew any evaluation of how effective the film is at conveying its feminist critiques. By contrast, I think that it is the change in the viewer's emotions, rather than intertextual connections to theory, in scenes like Caleb's described above, that determine an important part of how much the film is actually critical of the content it portrays. If the flip from enjoying the body of Ava on camera to the absolute horror of watching the footage of Jade trying to break down the glass door wasn't so emotionally dramatic, then the critique of complicity in the male gaze wouldn't have been conveyed. Jones briefly describes *Ex Machina* as "an arthouse film that strategically employs generic conventions – fairy tale, SF, horror – in order to unsettle and manipulate audience response,"[39] but I think this assessment brushes over the genre conventions (particularly horror) and audience manipulation used to deliver feminist critique. *Ghost in the Shell* also utilizes some of these conventions to manipulate and unsettle the audience, but as discussed before, it couples these conventions in ways that are absolutely unaware (and even supportive) of the misogynistic content it portrays. It has already been established that both films heavily feature the trope of inanimate or doll-like women featured as aesthetic design elements for men, but a direct comparison of how these scenes are

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[39] Ibid., 1.

emotionally framed demonstrates why *Ex Machina* can deliver some effective feminist critique while *Ghost in the Shell* is totally uncritical of its misogynistic content.

In the scene where Caleb discovers the bodies of android women hanging as props in Nathan's room in *Ex Machina*,[40] a myriad of techniques is used to unsettle the audience, most with reference to those expected in horror films. Beginning with Caleb hacking into Nathan's computer, a shaky, handheld shot emphasizes the tense atmosphere that is established by the fast-paced, agitated music. As the scene progresses, shots of Caleb's increasingly horrified face are lit darkly, and the music adds low discordant chords to high grating notes reminiscent of screams. This are typical horror movie genre techniques, and they help alert the audience to the horrifying nature of what is taking place. In the footage Caleb watches, the effect is even stronger, as the sped-up, sudden cuts between surveillance footage created a destabilizing and disjointed effect. The most horrifying aspect of the footage and the continuing scene where Caleb walks over to Kyoko and the bodies hung in Nathan's closet, however, is the way in which the film plays with the body-horror of Nathan's construction and manipulation of the android women. The first shot of Lily the audience sees is a freestanding set of hips and legs that are slowly added onto until finally a head and then a face are added, and she becomes indistinguishable from a human woman. Unlike Lily, Jasmine seems like an inanimate doll that Nathan manipulates and drags around, reminiscent of a murdered body. This effect is compounded by her lack of skin covering her head, giving her the appearance of only a shiny chrome skull. Finally, Jade's self-mutilation as she screams against the door creates a thoroughly disturbing climax to the surveillance footage that wouldn't feel out of place in modern "found footage" horror film.

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[40] This scene begins at 01:09:50.

This set up is what makes the next scene in which Caleb actually opens the closets to find the bodies of the women, so effectively horrifying. In a movie industry saturated by images of violence, and particularly violence against women, just seeing the bodies of Nathan's android women hanging in their closets would have been less effective in getting the audience to understand the violence implied by the bodies of women hanging limply as aesthetic decoration. The lack of limbs on Lily, and Jasmine's lack of a head are unsettling body-horror elements, but after seeing the android women, and especially Jade, as animate thinking beings, their inanimate status as mere decoration is made sickening to the audience. Seeing the contrast between the two doesn't allow the viewer to think of the androids as mere empty shells, but the bodies of women murdered and then displayed as trophies, making this imagery almost more grotesque than the footage that preceded it.

Consider this content in comparison with the scene in *Ghost in the Shell* in which the geisha inspired androids, previously shown as aesthetic features of a banquet provided by Hanka Robotics, suddenly initiate a hack on the Hanka representative, Dr. Osmond.[41] This scene is less coded by music, lighting, and camera technique as a horror scene than the one discussed in *Ex Machina*, but still utilizes some aspects of the genre to create a horrified reaction in the audience. Although the all-black eyes of the geisha companion bots are slightly unsettling, the horror aspects of the scene don't kick in until a moment in which one of the androids begins to over-pour the tea of Dr. Osmond and he reacts with anger and confusion. After that moment, the androids transition from slow, smooth motion to unsettlingly rapid, jerky movements. They drag their male patrons backwards suddenly with inhuman strength, and the one holding Dr. Osmond opens her face and from her mouth shoots wires into the ports on the back of his neck. While

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[41] The banquet scene begins at 9:15.

disconcerting enough in its own right, the unhinging of the face at the jaws and the projectile locking mechanism of the wires are similar to many "creature" designs in the horror movie industry that feature a set of smaller projectile jaws that emerge from the throat. Inspired by the anatomical features of eels, this type of design was popularized by the creatures in Ridley Scott's science fiction horror *Alien* series. If that weren't enough reference to the geisha bots as horror film creatures, as the geisha android hacks Dr. Osmond, she also suddenly dislocates her limbs and drags him, spider-like up the wall of the banquet-hall. The effect is chilling and clearly manipulates the audience expectations by changing the geisha androids from an innocuous and seemingly decorative part of the scenery into a horror movie creature.

Both the scenes from *Ex Machina* and *Ghost in the Shell* create horror and unsettling effects dealing with very similar content. They both deal with android women treated merely as aesthetic parts of environments created for men. However, how both films utilize elements of horror to frame this content very differently. On one hand, *Ex Machina* utilizes a contrast between animate and inanimate images of the android women in order to make the images of their inanimate bodies horrifying to the audience. This helps deliver the feminist critique of both the male gaze and power dynamics that control and objectify these women by essentially comparing these effects to murder. While the images of the animate androids in these scenes use horror tropes, the audience most certainly is on the side of the android women victims over Nathan. On the other hand, *Ghost in the Shell* has a similar contrast between animate and inanimate images of android women, but this contrast is used to make the *animate* images of these women horrifying. The geisha companion bots become horrifying as they step out of their prescribed role as silent doll-like servers, gaining what at least at the time seems to be agency. In *Ghost in the Shell* the geisha androids are the horrifying aggressors when they break free from

male control, and the men are framed as victims of their agency. Instead of utilizing audience emotions and reactions to deliver a critique of the male gaze and male control over women, the elements of horror in *Ghost in the Shell* actually seem to encourage this control. The contrast between the two demonstrates that while an awareness of feminist theory can help to create a more feminist film, the effectiveness of communicating these ideas to the audience lies largely in the emotional framing and manipulation of the audience response to content, rather than the content itself.

There are, however, caveats to this assessment of *Ex Machina* as a critical deliverer of feminist critique. While when compared with a film so unaware as *Ghost in the Shell*, it is tempting to give a full-throated approval of the subtler *Ex Machina*, there are still questions about the ways it participates in the male gaze in order to critique it. Because, for all that it frames these elements as horrifying and villainous, the film is still brimming with graphic violence against and sexual objectification of women. Even in a culture full of imagery of brutalized women's bodies, the images of *Ex Machina*'s naked, dismembered, and broken bodies stand out. And even if it is framed critically, the presumed straight white male viewer still gets to participate in the male gaze while watching the naked forms of Kyoko and Ava, while women must still watch bodies like theirs endure mutilation, control, and sexual objectification. I do believe it's important to integrate considerations of viewer response in order to analyze how the film manipulates the audience in order to make its point, but this is also an important aspect of viewer response. After a life-time of watching images of women objectified and hurt for the pleasure of men, can any images of the same, no matter how shocking, drive home the point that these practices are wrong? In a culture that normalizes the male gaze and male control over

women's bodies, a more shocking and socially disruptive film might just be one in which none of these practices were present.

Section 9: Ineffable Joi and Questions of Feminist Representation

Up until this point, my analysis has focused on the relationship between the control of the imagery of android women, and the control held over their material bodies and circumstances. But *Blade Runner 2049* also updates the conversation about android women and AI to ask, what happens when those bodies disappear entirely? What are the possibilities for the feminine when materiality is removed as a concern? Replicant women in this film are clearly designed for the pleasure of men, working as prostitutes and sold as pleasure slaves, roles and descriptions that make them both disposable and interchangeable. But the disposability and interchangeability of replicant women also seems to be a feature of their materiality. If a man dislikes one replicant woman he must dispose of her and choose a new one, because one woman cannot be all things to all men. In order to solve this problem, the Wallace corporation has developed the product/holographic woman, Joi.

The first time the audience sees Joi is actually as one of the monumental advertisements pervasive throughout film that show her from behind her advertising slogan, "Everything you want to see. Everything you want to hear."[42] Minutes later, she is introduced in the apartment of K, the male replicant Blade Runner and protagonist of the film.[43] Initially, only her voice is

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[42] 15:45 on the upper right. A woman's voice also declares from the ad, "Joi goes anywhere you want her to go," referencing the Wallace corporation's add-on to Joi that allows her to be integrated into a portable USB-like stick, vaguely reminiscent of a portable Amazon Echo or Google Home.

[43] 16:30

heard in a domestic banter with K that makes them seem like a traditional husband and wife. The irony of this is made clear on her reveal by some of the things she says, like that she will fix his shirt, or asking him to pour her a drink – impossibilities considering her holographic status. When she finally appears, it is in the guise of an impeccable 1950s housewife, dressed to the nines, and bringing K a perfect holographic dinner to overlay onto his unappetizing meal. However, as Joi and K speak, she begins to flit between visual personas to match her emotional tone as she tries to indulge and cheer K. As she asks him about his day she remains the empathetic housewife, but as she asks him to read Nabokov's *Pale Fire* to her she suddenly dons black clothes in a contemporary style, presumably to make her seem more intellectual. When K responds with, "You hate that book," she tells him, "I don't want to read either," and flits between a long red gown and then to a short sparkling flapper dress and blonde bobbed wig before asking him to dance. Each persona she takes on is task-specific to pleasing and engaging K, but even more worrying is that in this exchange her desires are portrayed as equally flighty as her appearance, and equally centered around pleasing him. Even later, as he shows her the present of the emanator, allowing her to leave the apartment for the first time, her long hair and loose blue shift dress give her a child-like wide-eyed wonder appropriate to the situation he has put her in.

The problem with Joi, and the tension that follows her relationship with K, is that while she achieves everything he could want to hear and everything he could want to see, she remains untouchable. The very intangibility that allows her to be everything a man could want also prevents her from existing on the material plane. Her character and limitations seem designed as a simultaneous manifestation and critique of Beauvoir's Feminine Ideal and the hypocrisy that it entails. Joi may be able to achieve the contradictory terms of the ideal, flitting from one

manifestation of pleasing femininity to another, but her existence proves that this achievement

can never be embodied. She shows that the Feminine Ideal is uninhabitable for real bodies and

the "dispersed, contingent, and multiple existence of women" that Beauvoir describes in *The*

Second Sex.[44] The replicant prostitute Mariette, mired by her work in the demands of materiality,

criticizes K for his disinterest in "real" girls and, in the implications of visual language of the

film, her criticism seems to have real thorns. As Joi tries to arrange a way for her and K to

consummate their relationship, she enlists Mariette in order to overlay herself over Mariette's

body while she and K have sex. The result, however, is an uncomfortable and ever-shifting

amalgamation of the two women's features as the holographic Joi fails to merge both physically

and metaphorically with the material Mariette. The visual effect of this scene seems to suggest

the impossibility of imposing the contradictory ideal of femininity onto the bodies and existences

of real embodied women. To end the scene and emphasize this point, the camera cuts directly

away from the strange chimeric features of the semi-merged women to an outside advertisement

of Joi, who stares directly at the camera and smiles as a woman's voice declares that "Joi is

anything you want her to be." The contrast between the two shots makes clear that when she is

promoted as ideal or promise, Joi seems beautiful, but the reality of her attempted embodiment

or realization seems to create something unsettlingly like an abomination.

  The fact that Joi is also a product, sexualized and advertised for men as a ubiquity in the

background of *Blade Runner*'s cityscape, suggests advertising's role in both creating and selling

this *idea* of the woman to society as a whole. Women's voices and women's bodies comprise

almost the entirety of the advertising in *Blade Runner 2049*, from women's moving faces

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[44] Simone De Beauvoir, *The Second Sex*. Translated by Constance Borde and Sheila Malovaney-Chevallier. 1st ed.
(NY: Vintage Books, 2010), 266.

overlaid with calming voiceovers, to monumental ballet dancers selling "Soviet Happy," and sexualized dancing girls in tiny miniskirts.[45] It is notable that with none of these advertisements is it clear that there is a product associated with the images of the women, subtly suggesting instead that it is the image and idea of the women, each facets of the Feminine Ideal, that are actually being sold. The film also suggests a sense of historicity to this phenomenon, showing the radioactive ruins of Las Vegas filled with huge statues of naked women, much like the giant representations of Joi that fill *Blade Runner*'s version of Los Angeles.[46] Their mouths hang suggestively open, and in one instance a set of statues with closed eyes and open mouths mirror the stance of Joi earlier in the film as she was frozen while attempting to kiss K.[47] The connections between the statues and Joi suggest that the ideal of the woman, and particularly the sexualized woman, as an ideal sold to society have a long history that transcends medium, encouraging a comparison similar images in our magazines, billboards, television, paintings, and artwork all the way back to Greek and Roman statues, pulled from ruins that the toppled statues in Las Vegas seem to evoke.

Just as in *Ex Machina*, *Blade Runner 2049* uses its visual medium to deliver a critique of misogynistic and patriarchal aspects of society. However, just as with *Ex Machina*, it is worth examining whether or not this makes *Blade Runner 2049* a feminist film, and whether its framed critique of these aspects exempts the film of criticism for featuring misogynistic and violent content. The director of *Blade Runner 2049*, Denis Villeneuve, is known for female-driven narratives such as *Sicario* (2015) and *Arrival* (2016), and the film certainly features large cast of

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[45] 20:30, 43:00, and 43:55 respectively.

[46] See 1:36:40 and 1:41:00 for the statues in Los Vegas and 15:45, 43:00, 1:30:49, and 2:17:00 for advertising of Joi in Los Angeles.

[47] 1:41:10 and 23:00 respectively.

women in a wide variety of roles, from Luv as the violent, motivated, yet ultimately submissive replicant; Joi, the holographic program; Mariette, the replicant prostitute; Lt. Joshi as K's anti-replicant yet protective superior in the police-force; Freysa Sadeghpour, the leader of the replicant underground; Dr. Ana Stelline, the scientist who designs memories for implant into replicants and the only replicant child; and a brief digital cameo of the replicant Rachel from the original 1982 *Blade Runner*. The film also narratively tries to decenter the masculine from its traditional role in science fiction dystopias, as the narrative veers away from the typical trajectory one in which a man is singled out as "special"[48] and that unique quality allows him to assume the role of the savior of that society. While both K and others initially assume that he is "of woman born," it is revealed that the child savior of the replicants was actually female, and that Deckard's daughter is in fact Dr. Ana Stelline.

Nonetheless, there are serious problems with all of these elements that seriously undercut a positive assessment of the film's content. First, on the question of the film's cast, while Villeneuve might support the inclusion of women, the lack of racially diverse casting in a film supposed to be set in a future Los Angeles is absolutely baffling. Of the sixteen named characters in *Blade Runner 2049*, only five were non-Caucasian (of which only one was a non-Caucasian woman), and all of them had extremely tertiary roles in which they each failed to appear on screen for more than ten minutes in a film that lasted two hours and forty-three minutes. Furthermore, despite the film's liberal use of both Japanese and Chinese languages and aesthetics, not a single East-Asian character was cast. If *Blade Runner 2049* wishes to present a critique of the way women are treated in society, its critique is undermined by its near total neglect of women of color. Also, while the film may try to decenter the traditional masculine

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[48] As Joi describes him, upon learning mistakenly that he is "of woman born".

savior narrative and strengthen the role of women, its attempt to do so appears fairly weak considering that the film's story is still centered around the male protagonist until the very last scene. Up until the last few minutes, the story is almost entirely oriented around and focalized through the male main character, making it K's story, regardless of whether or not K is "of woman born." In actuality, a story which effectively decentered the masculine narrative would have been one which didn't center on the story of a man.

The most compelling argument against *Blade Runner 2049*'s feminist position, however, is the same as the criticism I level against *Ex Machina*: the film's complicity in perpetuating the content it seeks to critique. While *Blade Runner 2049* and *Ex Machina* may be more self-aware and frame their misogynistic content less positively than *Ghost in the Shell*, the images they disseminate into culture are primarily of incredible violence against and sexual objectification of women. In this, *Blade Runner 2049* and *Ex Machina* are much more excessive than *Ghost in the Shell* and yet ultimately receive less criticism for their extreme violence and misogyny because of the way they frame that content. While I accept that framing does impact audience reception of that content, I also posit that by judging a film only by its framing, we may affirm imagery that we would otherwise find absolutely unacceptable. Under any other circumstances, would we accept watching men do to women what they do in these films? This, I worry, has the potential to be even more toxic to our culture, for if we compare the viewer experience for *Blade Runner 2049* and *Ex Machina* between genders, the same hierarchy of male enjoyment and pleasure at the expense of women's discomfort is perpetuated. While straight male viewers of both of these films are allowed to participate in the frequent full-frontal nudity of women and erotic pleasure of the male gaze without ever feeling that gaze turned back upon the male body, female viewers

of these films must watch bodies like theirs brutalized, dismembered, controlled, objectified, and violated. Regardless of framing, the emotional effects of this imagery are not negligible.

I came to this project because of my own experience watching *Blade Runner 2049*. While intellectually I could appreciate the feminist messages of the film, I remember leaving the cinema confused and uncomfortable. Many aspects of the film unsettled me, but in particular I could not forget the scene with which I began this thesis, in which Niander Wallace, the male creator of replicants, ushered a new naked replicant woman into life, slit open her stomach, kissed her, and then turned away, leaving her to die on the ground. At the time I watched it, I was viscerally disgusted and shocked, but after some reflection, I found what most horrified me was the sense of empathetic recognition I felt upon watching the nameless woman. I saw her pain and discomfort in being watched, her obvious sense of violation, her helplessness and shock in the aftermath and it felt familiar to me. It reminded me of the countless incidents in my own life, that began before I was even fully aware of them, in which I have been sexually objectified and then had my sexual object status thrown publicly in my face, while men took pleasure in my discomfort, embarrassment, and helplessness. Perhaps a year ago I would not have made such a personal connection in an academic work, but in a time where more and more women speak about their histories of sexual harassment and assault, I want to ground my work in the experiential as well as the academic. I wish to make the point that women do not need extreme representations of our own degradation framed as harmful to know that it is so. For those of us with that lived experience, living in a culture where misogynistic images and ways of seeing are ubiquitous, media that recycles these images and perspectives feels like a perpetuation of those same tyrannical hierarchies. What these films may miss, in their eagerness to recreate what they

wish to critique, is the potential to create new imagery and new ways of seeing that can break this harmful cycle of reiteration.

Conclusion: The Future of Gendered Bodies

Up until this point, I have written in generalities about the future of gendered androids and AI, but it is also worth taking time to speak concretely about the present. Already our cultural sphere is permeated with default female-gendered AI like Alexa, Cortana, Siri, and Google's digital assistant, that function in subservient positions as personal secretaries and assistants. Apart from the occasional pre-programmed snarky remark, their job is essentially to perform endless menial tasks, from setting timers to writing lists, and to take whatever comes their way without complaint, a role suspiciously similar to the cultural role traditionally expected of women both at home and in the workplace. While some have tried to explain the gendered disparity of AI through research suggesting consumers prefer female voices to male ones,[49] considering cultural bias against aspects of women's voices and the immense and gendered criticism female radio hosts and other female presenters receive in regard to their voices,[50] I find myself deeply skeptical of this explanation. The suggestion that these AI manifest the way they do because of reasons incidental to cultural stereotypes is undercut by research suggesting that

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[49] Brandon Griggs, "Why Computer Voices Are Mostly Female," CNN Business, October 21, 2011 accessed October 10, 2018. https://www.cnn.com/2011/10/21/tech/innocation/female-computer-voices/index.html

[50] "Vocal Fry Hurts Women in the Labor Market." EurekAlert. May 28, 2014. Accessed October 12, 2018. https://www.eurekalert.org/pub_releases/2014-05/uom-vfh052714.php.

Ann Friedman, "Can We Just, Like, Get Over the Way Women Talk?" The Cut. July 9, 2015. Accessed October 12, 2018. https://www.thecut.com/2015/07/can-we-just-like-get-over-the-way-women-talk.html.

not only do the cultural stereotypes between feminine coded work and masculine coded work

make people more comfortable with robots that ascribe to these gendered expectations, but also

that male-gendered robots are perceived as more agentic than female-gendered ones.[51] Moreover,

the design decisions behind AI like Alexa, Siri, Cortana, and others directly reference cultural

works and media as their influences. The designers behind Alexa cite the computer voiced by

Majel Barrett Roddenberry on the Starship Enterprise in *Star Trek: The Original Series* as their

source of inspiration for the voice of the AI, while Siri's name comes from the Norse meaning,

"a beautiful woman who leads you to victory," and Cortana is named after a nude female

character in the video game *Halo*.[52] Considering these overt references, it is difficult to argue

that media and the tropes therein have no effect on the progression of gendered technology.

Culture and technology are mutual drivers that allow the perpetuation of these gendered

stereotypes.

Meanwhile, the ethics of androids, and particularly androids designed for sex, are

becoming the center of moral and cultural arguments about the ethicality of treating women's

bodies as sex toys, regardless of whether those bodies are human. These debates play out in

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[51] Benedict Tay, Younbo Jung, and Taezoon Park. "When Stereotypes Meet Robots: The Double-edge Sword of Robot Gender and Personality in Human–robot Interaction." *Computers in Human Behavior* 38 (2014): 75-84. doi:10.1016/j.chb.2014.05.014.

Eyssel, Friederike, and Frank Hegel. "(S)hes Got the Look: Gender Stereotyping of Robots." *Journal of Applied Social Psychology* 42, no. 9 (2012): 2213-230. doi:10.1111/j.1559-1816.2012.00937.x.

[52] Penelope Green,"'Alexa, Where Have You Been All My Life?'." *The New York Times*, July 11, 2017. Accessed October 10, 2018. https://www.nytimes.com/2017/07/11/style/alexa-amazon-echo.html.

Tanya Lewis, "Rise of the Fembots: Why Artificial Intelligence Is Often Female." Live Science. February 15, 2015. Accessed October 10, 2018. https://www.livescience.com/49882-why-robots-female.html.

Adrienne Lafrance, "Why Do So Many Digital Assistants Have Feminine Names?" The Atlantic. March 30, 2016. Accessed October 10, 2018. https://www.theatlantic.com/technology/archive/2016/03/why-do-so-many-digital-assistants-have-feminine-names/475884/.

popular media like the BBC's series *Humans* or HBO's *Westworld* and are mirrored by debates

in academia and popular discourse. Many activists and researchers share my concerns about the

role using women sexbots may play in reinforcing cultural stereotypes that sexualize women,[53]

while others like Ross Douthat in *The New York Times* see them as a potential alleviation for the

violence of "incels," a subculture of men who are frustrated by their inability to have sex with

women.[54] While I believe Douthat's article deeply misrepresents and underestimates the flawed

logic and misogyny of the incel movement, the article by Amia Srinivasan that he cites is deeply

relevant to cultural anxieties about sex but also specifically to the sexbot debate.[55]

Srinivasan confronts the totalizing logic of sex positivity by certain elements of the

feminist movement through questioning whether or not consent really should be the only limiting

factor of desire. While no one can demand sex, and no one can demand desire of others,

Srinivasan argues that why we desire what we desire and who we desire are deeply political

questions, suggesting that our choices are not as "free" as we would like them to be. On the

politics of desire, she writes:

> When we see consent as the sole constraint on OK sex, we are pushed towards a
>
> naturalization of sexual preference in which the rape fantasy becomes a primordial rather
>
> than a political fact. But not only the rape fantasy. Consider the supreme fuckability of
>
> "hot blonde sluts" and East Asian women, the comparative unfuckability of black women

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[53] Anne Cranny-Francis, "Is data a toaster? Gender, sex, sexuality and robots." *Palgrave Communications* 2, no. 1 (October 7, 2016): 1-6. Accessed March 3, 2018. doi:10.1057/palcomms.2016.72.

[54] Ross Douthat, "The Redistribution of Sex." *The New York Times*, May 2, 2018. Accessed August 10, 2018. https://www.nytimes.com/2018/05/02/opinion/incels-sex-robots-redistribution.html.

[55] Amia Srinivasan, "Does Anyone Have the Right to Sex?" *The London Review of Books* 40, no. 6 (March 22, 2018): 5-10. https://www.lrb.co.uk/v40/n06/amia-srinivasan/does-anyone-have-the-right-to-sex.

and Asian men, the fetishization and fear of black male sexuality, the sexual disgust

expressed towards disabled, trans and fat bodies. These too are political facts, which a

truly intersectional feminism should demand that we take seriously.

Considering this logic in the context of sexbots, which rather than consent has the single

presupposition that "it won't harm anyone real," it's possible to see the political and cultural

dangers of selling life-like bodies for sex. "It won't harm anyone real," doesn't just naturalize the

rape fantasy into sexual desire, but seems to presuppose it. Moreover, creating the bodies of

these sexbots is not only asking what sort of body is worthy of being desired, but what sort of

body is worthy of being desired as an ownable object, with which one can have sex without the

constraints of consent. Though the market for sexbots is perhaps not yet large enough to test, a

quick glance reveals the bodies being sold do in fact conform to the politics of desire Srinivasan

describes above. Sex robots and life-like dolls are almost entirely women, and mostly Caucasian

or East Asian with very specific features and proportions. Again, the politics of technology and

culture intertwine to perpetuate the hierarchies of sex and gender that have consequences for real

women.

In her discussion of gendered robots in Japan, Jennifer Robertson applies a quote from

Manuela Rossini about biomedical technologists to roboticists in order to say that they are,

"*imagineers,* not just of bodies but of cultural configurations and social arrangements as well,"

but that "the act of imagining per se does not necessarily yield fresh or progressive results."[56]

Between the reinforcing sides of media and technology, I would add to this and say that the

creators of *images* of these bodies, whether they occur in film, television, or advertisements, are

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[56] Jennifer Robertson,"Gendering Humanoid Robots: Robo-Sexism in Japan." *Body & Society*16, no. 2 (July 5, 2010): 1-36. doi:10.1177/1357034X10364767.

also *"imagineering"* not just the present, but the future of gendered and sexed bodies and how they are treated. I have written previously about the problems with recycling the same gendered tropes and stereotypes in media, even when used in a self-aware manner to problematize this content. Even presenting these models of gendered hierarchies for critique seems to perpetuate their existence by adding to the great body of cultural content that utilizes the male gaze and the objectification of women. So, the question becomes, if our current system is caught in a cycle in which both media and technology reinforce traditional gender roles and hierarchies, then how do we imagineer in order to "yield fresh or progressive results"?

I have offered in my section, "The Android Manifesto," the potential of android bodies proliferating variations on sex and gender that necessitate the creation of new, non-binary models for understanding our own biology and identities. However, considering the highly binary and hierarchical gender models currently being produced in commercial AI and robotics, this potential future seems increasingly elusive. The same can be said of representations of AI and androids in popular media. Although visions of androids multiply throughout film, television, and advertisements, they constructed gender, race, sexuality, and other aspects of identity in highly problematic ways, of which *Ghost in the Shell*, *Ex Machina*, and *Blade Runner 2049* only give a small taste. When was the last time a major funded blockbuster was made that featured an android woman not under the control of a man? When was the last time an East Asian android woman had a storyline in which she wasn't given a submissive and subservient role? When do we see androids invested in relationships and sexualities other than the heterosexual? When will we see black androids, transgender androids, disabled androids, nonbinary androids play out storylines that don't center around their mis-treatment for these aspects of their identity? Of

course, the same could also be asked, with not much better response, for the representations in media for all of the identity categories of these *people*.

My best solution follows my criticism of the makeup of creators in the film industry: change the imagineers. Of the three directors, ten producers, and six writers involved in the creation of *Ghost in the Shell*, *Ex Machina*, and *Blade Runner 2049*, only one was a woman. Nor is this some freak and isolated instance of gender bias in the film industry. Of the top 250 films of 2017, 88% had no female directors, 83% had no female writers, 80% had no female editors, and 96% had no female cinematographers.[57] Of the top-grossing 1,100 films from 2007 to 2017 there were only *four* black female directors: Ava DuVernay, Gina Prince-Bythewood, Sanaa Hamri, and Stella Meghie. During this entire period only three Asian female directors and one Latina director were hired to direct. From the ninety-five C-level executives across the seven major media companies, only 17.9% were women, and only four individuals were women of color. Moreover, the impact on the types and content of film made cannot be overstated. In the top-grossing 100 films of 2017, in films with at least one woman director and/or writer, females accounted for 45% of protagonists, 48% of major characters, and 42% of all speaking characters. These percentages dropped to 20%, 33%, and 32% respectively for films with exclusively male directors and/or writers. Of the speaking roles under a black director, 18.5% were black women, compared to the 2.5% of speaking roles that were held by black women under a non-black director. While there aren't reliable statistics about the percentages of LGBT movie-makers, the

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[57] "2017 STATISTICS." Hollywood and Women. Accessed October 12, 2018. https://womenandhollywood.com/resources/statistics/2017-statistics/.

These and the rest of the statistics in this paragraph all come from the Women and Hollywood site, which collects statistics from more rigorous reports by the Center for the Study of women in Television and Film (https://womenintvfilm.sdsu.edu/wp-content/uploads/2018/02/2017_Its_a_Mans_Celluloid_World_Report_2.pdf), The Inclusion Initiative (http://assets.uscannenberg.org/docs/inclusion-in-the-directors-chair-2007-2017.pdf), and the Directors Guild of America (https://www.dga.org/News/PressReleases/2018/180621-Feature-Film-Director-Diversity-Remained-Low-in-2017.aspx)

fact that out of 4,403 characters with an apparent sexuality, only 0.7% were lesbian, gay, or bisexual suggests that they may be equally underrepresented. There were no transgender characters recorded in top-grossing 100 films of 2017.

In addition to the increasing pressure on the film industry to change its domination by straight white males, the recent allegations of the Harvey Weinstein scandal and the #MeToo movement have revealed the toxic and sexually objectifying nature of the film industry for even the most powerful and well-known women. And it is not unrelated that straight white male domination of this industry coincides with one of the worst sexual conduct scandals of the past fifty years. Derek Thompson in *The Atlantic* connects facets of Hollywood to sociological studies showing that the worst industries for sexual harassment feature "male domination in positions of power; work arrangements that are relatively transient; and young, single women in more-vulnerable and low-paying occupations," all of which are combined in the movie business.[58] So can it really be surprising that an industry dominated by straight white males and rife with the objectification and harassment of women produces content that normalizes these behaviors in culture?

Nor are these aspects of male domination limited to merely the film industry. Pervasive harassment in STEM fields, particularly of women of color and LGBTQ individuals, combined with a pervasive "masculinized" culture are primary contributors to the disparities of gender, race, and non-heterosexual sexualities in the sciences.[59] Between media, science, and technology,

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[58] Derek Thompson, "The Brutal Math of Gender Inequality in Hollywood." The Atlantic. January 11, 2018. Accessed October 12, 2018. https://www.theatlantic.com/business/archive/2018/01/the-brutal-math-of-gender-inequality-in-hollywood/550232/.

[59] Chardie L. Baird, "Male-dominated Stem Disciplines: How Do We Make Them More Attractive to Women?" *IEEE Instrumentation & Measurement Magazine* 21, no. 3 (May 18, 2018): 4-14. doi:10.1109/MIM.2018.8360911.

the biggest drivers of culture are not only overwhelmingly controlled by straight white male interests, but also harbor systematic harassment, objectification, and discrimination against women and other minority groups. With such a system controlling the media we consume, the products we can buy, and the available knowledge produced by institutions of science, a change in leadership and control in these industries should be one of the major priorities of any progressive movement seeking society-wide cultural change. In order to change the future of gendered bodies, it is imperative to open the institutional doors of science, media, technology, and culture to a new and diverse generation of imagineers, and to encourage them to experiment with possibilities outside of the hierarchies and binaries of the past. Then we might be able to embrace a post-human future as one in which the imaginative sources for our bodies are more diverse, more democratic, and more autonomous than the present.

Sapna Cheryan et. al."Why Are Some STEM Fields More Gender Balanced than Others?" *Psychological Bulletin*143, no. 1 (January 2017): 1-35. doi:10.1037/bul0000052.

Julia Belluz, "4 Big Takeaways from a Huge New Report on Sexual Harassment in Science." Vox. June 13, 2018. Accessed October 10, 2018. https://www.vox.com/science-and-health/2018/6/13/17453360/sexual-harassment-report-science-metoo.

Works Cited & Bibliography

"2017 STATISTICS." Hollywood and Women. Accessed October 12, 2018.

       https://womenandhollywood.com/resources/statistics/2017-statistics/.

Ainsworth, Claire. "Sex Redefined." *Nature* 518, no. 7539 (February 19, 2015): 288-91.

       doi:10.1038/518288a.

Baird, Chardie L. "Male-dominated Stem Disciplines: How Do We Make Them More Attractive

       to Women?" *IEEE Instrumentation & Measurement Magazine* 21, no. 3 (May 18, 2018):

       4-14. doi:10.1109/MIM.2018.8360911.

De Beauvoir, Simone. *The Second Sex*. Translated by Constance Borde and Sheila Malovaney-

       Chevallier. 1st ed. NY: Vintage Books, 2010.

Belluz, Julia. "4 Big Takeaways from a Huge New Report on Sexual Harassment in Science."

       Vox. June 13, 2018. Accessed October 10, 2018. https://www.vox.com/science-and-

       health/2018/6/13/17453360/sexual-harassment-report-science-metoo.

Bordo, Susan . "The Body and the Reproduction of Femininity." In *Unbearable Weight:*

       Feminism, Western Culture, and the Body, 745-56. 2nd ed. Berkeley, CA: University of

       California Press, 2004.

Brandon Griggs. "Why Computer Voices Are Mostly Female." CNN Business. October 21,

    2011. Accessed October 10, 2018.

    https://www.cnn.com/2011/10/21/tech/innovation/female-computer-voices/index.html.

Butler, Judith. *Bodies that matter: on the discursive limits of "sex"*. New York: Routledge, 2011

Butler, Judith. *Gender Trouble: Feminism and the Subversion of Identity*. New York, NY:

    Routledge, 1990.

Butler, Judith. "Sex and Gender in Simone de Beauvoir's Second Sex." *Yale French Studies*, no.

    72 (1986): 34-49. Accessed March 11, 2018. doi:http://www.jstor.org/stable/2930225.

Cheryan, Sapna, Sianna A. Ziegler, Amanda K. Montoya, and Lily Jiang. "Why Are Some

    STEM Fields More Gender Balanced than Others?" *Psychological Bulletin* 143, no. 1

    (January 2017): 1-35. doi:10.1037/bul0000052.

Cranny-Francis, Anne. "Is data a toaster? Gender, sex, sexuality and robots." *Palgrave

    Communications* 2, no. 1 (October 7, 2016): 1-6. Accessed March 3, 2018.

    doi:10.1057/palcomms.2016.72.

Devlin, Hannah. "AI Programs Exhibit Racial and Gender Biases, Research Reveals." *The

    Guardian*, April 13, 2017. Accessed April 30, 2018.

https://www.theguardian.com/technology/2017/apr/13/ai-programs-exhibit-racist-and-sexist-biases-research-reveals.

Douthat, Ross. "The Redistribution of Sex." *The New York Times*, May 2, 2018. Accessed August 10, 2018. https://www.nytimes.com/2018/05/02/opinion/incels-sex-robots-redistribution.html.

Dreger, Alice. *Galileo's Middle Finger: Heretics, Activists, and One Scholar's Search for Justice*. New York, NY: Penguin Group, 2015.

Eyssel, Friederike, and Frank Hegel. "(S)hes Got the Look: Gender Stereotyping of Robots." *Journal of Applied Social Psychology* 42, no. 9 (2012): 2213-230. doi:10.1111/j.1559-1816.2012.00937.x.

Friedman, Ann. "Can We Just, Like, Get Over the Way Women Talk?" The Cut. July 9, 2015. Accessed October 12, 2018. https://www.thecut.com/2015/07/can-we-just-like-get-over-the-way-women-talk.html.

Green, Penelope. "'Alexa, Where Have You Been All My Life?'." *The New York Times*, July 11, 2017. Accessed October 10, 2018. https://www.nytimes.com/2017/07/11/style/alexa-amazon-echo.html.

Haraway, Donna. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the

    Late Twentieth Century." In *Simians, Cyborgs and Women: The Reinvention of Nature*,

    149-81. New York: Routledge, 1991.

Henke, Jennifer. ""Ava's Body Is a Good One": (Dis)Embodiment in Ex Machina." *American,*

    British and Canadian Studies Journal 29, no. 1 (2017): 126-46. doi:10.1515/abcsj-2017-

    0022.

Jacobson, Brian R. "Ex Machina in the Garden." *Film Quarterly* 69, no. 4 (2016): 23-34.

    doi:10.1525/FQ.2016.69.4.23.

Jones, Katie. "Bluebeardean Futures in Alex Garland's Ex Machina (2015)." *Gender Forum;*

    Köln, no. 58 (2016). Accessed January 30, 2018.

    https://colorado.idm.oclc.org/login?url=https://search.proquest.com/docview/1848

    168044?accountid=14503.

Lawrence, Adrienne. "Why Do So Many Digital Assistants Have Feminine Names?" The

    Atlantic. March 30, 2016. Accessed October 10, 2018.

    https://www.theatlantic.com/technology/archive/2016/03/why-do-so-many-digital-

    assistants-have-feminine-names/475884/.

Mori, Masahiro, Karl MacDorman, and Norri Kageki. "The Uncanny Valley [From the

    Field]." *IEEE Robotics & Automation Magazine*, June 6, 2012, 98-100.

Mulvey, Laura. "Dossier." *Screen* 56, no. 4 (December 1, 2015): 481-85. doi: https://doi-
org.colorado.idm.oclc.org/10.1093/screen/hjv059.

Mulvey, Laura. "Visual Pleasure and Narrative Cinema." In *Film Theory and Criticism:
Introductory Readings*, 833-44. New York: Oxford University Press, 1999.

Nishime, LeiLani. "Whitewashing Yellow Futures in Ex Machina, Cloud Atlas, and
Advantageous: Gender, Labor, and Technology in Sci-fi Film." *Journal of Asian
American Studies* 20, no. 1 (February 2017): 29-49.
doi:https://doi.org/10.1353/jaas.2017.0003.

Olson, Parmy. "Racist, Sexist AI Could Be A Bigger Problem Than Lost Jobs." *Forbes*,
February 26, 2018. Accessed April 30, 2018.
https://www.forbes.com/sites/parmyolson/2018/02/26/artificial-intelligence-ai-bias-
google/#2c4f68541a01.

Olson, Parmy. "The Algorithm That Helped Google Translate Become Sexist." *Forbes*, February
15, 2018. Accessed April 30, 2018.
https://www.forbes.com/sites/parmyolson/2018/02/15/the-algorithm-that-helped-google-
translate-become-sexist/#29ae4e2c7daa.

Parker-Flynn, Christina. "Joe and the 'Real' Girls: Blade Runner 2049." *Gender Forum; Köln*,
no. 66 (2017). Accessed January 30, 2018.

https://colorado.idm.oclc.org/login?url=https://search.proquest.com/docview/1987343161?accountid=14503

Robertson, Jennifer. "Gendering Humanoid Robots: Robo-Sexism in Japan." *Body & Society* 16, no. 2 (July 5, 2010): 1-36. doi:10.1177/1357034X10364767.

Rose, Steve. "*Ghost in the Shell's* Whitewashing: Does Hollywood Have an Asian Problem?" *The Guardian*, March 31, 2017. Accessed October 1, 2018. https://www.theguardian.com/film/2017/mar/31/ghost-in-the-shells-whitewashing-does-hollywood-have-an-asian-problem

Srinivasan, Amia. "Does Anyone Have the Right to Sex?" *The London Review of Books* 40, no. 6 (March 22, 2018): 5-10. https://www.lrb.co.uk/v40/n06/amia-srinivasan/does-anyone-have-the-right-to-sex.

Tay, Benedict, Younbo Jung, and Taezoon Park. "When Stereotypes Meet Robots: The Double-edge Sword of Robot Gender and Personality in Human–robot Interaction." *Computers in Human Behavior* 38 (2014): 75-84. doi:10.1016/j.chb.2014.05.014.

Templeton, A. R. "Biological Races in Humans." *Studies in History and Philosophy of Science* 44, no. 3 (September 2013): 262-71. doi:10.1016/j.shpsc.2013.04.010.

Thompson, Derek. "The Brutal Math of Gender Inequality in Hollywood." The Atlantic. January
    11, 2018. Accessed October 12, 2018.
    https://www.theatlantic.com/business/archive/2018/01/the-brutal-math-of-gender-
    inequality-in-hollywood/550232/.

"Vocal Fry Hurts Women in the Labor Market." EurekAlert. May 28, 2014. Accessed October
    12, 2018. https://www.eurekalert.org/pub_releases/2014-05/uom-vfh052714.php.

Witherspoon, D. J., S. Wooding, A. R. Rogers, E. E. Marchani, W. S. Watkins, M. A. Batzer,
    and L. B. Jorde. "Genetic Similarities Within and Between Human
    Populations." *Genetics* 176, no. 1 (May 2007): 351-59. doi:10.1534/genetics.106.067355.

Yu, Ning, Feng-Chi Chen, Satoshi Ota, Lynne B. Jorde, Pekka Pamilo, Laszlo Patthy, Michele
    Ramsay, Trefor Jinkins, Song-Kun Shyue, and Wen-Hsiung Li. "Larger Genetic
    Differences Within Africans Than Between Africans and Eurasians." *Genetics* 161, no. 1
    (May 1, 2002): 269-74. http://www.genetics.org/content/161/1/269.