Uncanny valleys: sex, power, & the artificial person

Margo Arruda
DePaul University, marruda@mail.dePaul.edu

Follow this and additional works at: https://via.library.depaul.edu/etd

Recommended Citation
Arruda, Margo, "Uncanny valleys: sex, power, & the artificial person" (2020). College of Liberal Arts & Social Sciences Theses and Dissertations. 303.
https://via.library.depaul.edu/etd/303

This Thesis is brought to you for free and open access by the College of Liberal Arts and Social Sciences at Via Sapientiae. It has been accepted for inclusion in College of Liberal Arts & Social Sciences Theses and Dissertations by an authorized administrator of Via Sapientiae. For more information, please contact digitalservices@depaul.edu.
Uncanny Valleys: Sex, Power, & the Artificial Person

A Thesis

Presented in

Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

June 2020

BY

Margo Arruda

Department of English

College of Liberal Arts and Social Sciences

DePaul University

Chicago, IL
Abstract

This paper explores the impact of the creation of hyper-realistic animatronic sex rolls on the way in which the almost exclusively male customers view women’s autonomy. Through an examination of contemporary robotics theory as well as profiles on prospective clients for such dolls, the author outlines the highly gendered power dynamics inherent in their construction, marketing, and sale. Furthermore, this research utilizes three separate speculative fiction narratives to extrapolate out the social impact of the normalization of these dolls’ use. Through both the ethical theory and literary analysis, this paper concludes that the ethical implications of the sex robot is contingent upon its perceived personhood – a status which hinges on their ability to exhibit interiority and subjectivity.

Keywords: artificial intelligence, sex robots, science fiction, subjectivity, interiority
**Introduction**

In early 2019, the first android brothel opened in England. Staffed exclusively by hyperrealistic animatronic sex dolls, this establishment and its fellows set a new precedent for women and sex work. Furthermore, the adult toy company, Real Doll, has begun accepting orders for custom built robotic sex dolls – giving prospective clients the ability to design a doll to their exacting physical specifications as well as have a hand in the programming of the AI personality loaded into the doll. Clients are given the ability to select child dolls as well as chose a “frigid” setting which would allow the owner of such a doll to effectively simulate rape. These technological advancements have vast implications for the way in which western society views women’s bodies and its uses. In this paper, I will jump down the rabbit hole to explore the people designing, building, and purchasing these dolls in order to better understand the gendered power dynamics involved in their creation. An industry created by and for men, such bots are overwhelmingly marketed towards men – indeed even the limited number of male robots are primarily geared towards gay men rather than heterosexual women. Using the works of Hans Moravec and David Levy, I will examine the toxic tech bro culture from which these sex dolls have begun to emerge and the patriarchal power structures upon which this culture is founded.

There has thus far been little research or discussion surrounding the social impact of the creation of such dolls relative to the perceived value of women’s bodily autonomy and its resultant effects on gendered power dynamics. At what point will these sex robots become so sophisticated that one can no longer distinguish between fantasy and reality? How much must this technology advance before the line between object and subject becomes irrevocably blurred?
Once we pass through this uncanny valley and come out the other side, this new class of synthetic persons will necessitate a reconfiguration of slavery and labor laws. The successful creation of human-passing robots will radically redefine our understanding of bodily autonomy, subjectivity, and personhood.

As artificial intelligence and sex robot technology has progressed faster than our ethical systems to oversee such research, we often lack the language or real world experience to discuss their potential ethical implications. Speculative fiction narratives therefore play a vital role in the examination of these implications providing an intellectual playground in which to examine the direction these advancements might take as well as their societal consequences. This paper will explore representations of sex, power, and the artificial person in three speculative fiction narratives: Margaret Atwood’s 2015 novel *The Heart Goes Last*, Paolo Bacigalupi’s 2016 short story “Mika Model”, and Alex Garland’s 2014 film “Ex Machina”. These narratives are tied together by their examination of the hubris with which these highly advanced women-objects are created under the assumption that not only can they be controlled but that it is right for their creators to possess ultimate control over them. The latter two narratives examine potentialities in which these creations cannot be controlled, showing unprecedented subjectivity causing them to react in unexpected and violent ways. This destructive consequence of synthetic subjectivity forms the science fiction trope of the Apocalyptic AI – the assumption that a free-willed artificially intelligence being will by definition seek to destroy its creator, i.e. humanity. Throughout this paper I will deconstruct this trope and the fallacy of its biologically essentialist roots. I postulate that the eroticized rhetoric of dominance and submission rife throughout the robotics community acts as the foundation of dangerous miscalculations in the potential
subjectivity of artificial intelligence the result of which could lead to a violent and/or destructive bid for liberation.

**Technofetishism & The Tech Bro**

Rather than engage in a discussion about the inherent morality or immorality of the creation of artificial intelligence in and of itself, I will center this discussion upon the cultural context in which this technology is being created. Populated by insecure men usually bullied in school for their intelligence and focus on “nerd culture”, they have grown into wealthy men with huge socio-cultural influence – Mark Zuckerberg, Jeff Bezos, Elon Musk and the like – who believe that they are owed sexual attention from women now that they have fulfilled their fantasies of power. It is an industry rife with sexual harassment and assault with low female representation, especially in upper management positions. It is therefore of little surprise that the language of artificial intelligence programming is so mired in highly eroticized rhetoric of domination and control. David Levy, a computer programmer most noted for his 2008 book *Love and Sex With Robots*, highlights the computer engineer’s eroticized relationship to his work: “an act of programming has itself been compared to sex, in that programming is a form of control, of bending the the computer or the gadget to the will of the programmer, forcing the computer to behave as one wishes – domination.”

Levy indicates a culture that is less concerned with pleasure as the end result of a sexual relationship and more one of dominance and mastery over an object. The focus is then on bending the woman to the will of the programmer irregardless of

---

her particular feelings about the encounter. Deeply imbedded in this rhetoric is the belief that these men, drunk on their own power, are entitled to control the people, especially the women, around them. Social/sexual interactions then become a fundamental power struggle from the prospective of the programmer in which he is constantly vying for dominance over a prospective sexual partner, his colleagues, and even the artificial intelligence projects on which he is working.

The field of robotics is riddled with the rhetoric of dominance and submission, most notably in Hans Moravec’s theoretical work on the future of human/robot relationship in his 1988 book *Mind Children*. Moravec, a robotics futurist and adjunct professor at the Robotics Institute of Carnegie Mellon University, explicitly refers to robots as “[humanity’s] obedient and able slaves”\(^2\) claiming that they can and will be programmed to be the reverent servants of human masters: “Every nuance of their motivation is a design choice. They can be constructed to enjoy the role of servant to mankind.”\(^3\) In this disconcerting future for which Moravec espouses, man will engineer the perfect slave: programmed to happily fill its role as servant and slave to mankind, these robots will be entirely subject to the will of their creators. Moravec gives little indication to the morally dubious nature of this assertion – one that is dangerously naive at best and outright nefarious at worst. Harking back to the rhetoric of antebellum America, he draws upon the image of the happy slave – an image implicitly constructed to reenforce the economically convenient system of bondage and free labor. The theory of the happy slave acted as a method of reassuring slave owners of the morality of their system. If the slaves truly enjoyed

---


their work— if, indeed, they were created to serve their white masters— then their treatment was not cruel. Moravec reenforces his previous implications of unquestionable devotion and deference as the foundation of love for the robot-slave: “The robot would be exhibiting pure selfless, nonjudgemental devotion, the kind a good dog or superb friend offers.” The purest love, that of a close friend or prized pet, must exhibit complete selflessness and a refusal to judge its master. The superbness of its love is predicated on its willingness to disregard its own thoughts, feelings, or morality— i.e. its own subjectivity— for the sake of reassuring its master. The robot-slave exists only in relation to the human-owner where the value of the one must exist at the expense of the other.

Decades after the publishing of Mind Children, Levy would reiterate this relationship dynamic in his discussion of human/robot emotional attachments. Men in particular, he argues, will experience greater attachment to robots than to humans because the robot will always respond in a manner which continually reenforces human superiority:

It is of course reasonable to question why someone would have time for a robot friend but insufficient time for a human one. I believe the principle reasons will be the certainty that one’s robot friend will behave in ways one finds empathetic, always being loyal and having a combination of social, emotional, and intellectual skills that far exceeds the characteristics likely to be found in a human friend. Rather than prize a friendship or relationship which challenges one to be a better person, to push one to grow as a person and to consider viewpoints not his own, Levy advocates for a version of

---


friendship similar to Moravec’s dynamic. The truest friend will respond in ways that are always predictable, reenforcing the rightness of his own conclusions, the superiority of his thoughts and feelings, at the expense of its own. The appeal of the robot friend then is that it only exists in relation to its owner – devoid of subjectivity of its own, it exists purely to stimulate the emotional, intellectual, or sexual needs of the human owner, a need it will always meet because it has no needs of its own.

Dystopic Utopias

Moravec and Levy are representative of a decades-long toxic tech bro culture which combines nearly limitless wealth, a strong sense of entitlement, and a deep river of misogyny. This culture of dominance and submission is not confined to the programmers of artificial intelligence nor the robotics engineers creating the android bodies. The toxic entitlement of its creators carries down to its prospective buyers as well. In a 2003 poll conducted by the website www.BetterHumans.com investigating what sex technology most people desire, the clear favorite was “android love slave” with 41% of voters polled. Founded upon the desire to engage in sexual encounters with humanoid technology that enhances the owner’s pleasure while negating the need for real life human interaction, these men highlight the ultimate merging of an obsession with the technology as a means of power and influence, particularly over the female body. In his authoritative 1909 book The Sexual Life of Our Time, Iwan Bloch traces the discussion of interactive sex dolls to turn of the 20th century France. From dolls created to

---

mimic the appearance of deceased loved ones to pornographic fiction, 1900s Paris was alight with discussions about the construction and use of fornication dolls:

The most astonishing thing in this department is an erotic romance *La Femme Endormie* by madame B.; Paris, 1899, the love heroine of which is such an artificial doll, which, as the author in the introduction tells us, can be employed for all possible sexual artificialities, without, like a living woman, resisting them in anyway way. The book is an incredibly intricate and detailed exposition of this idea.  

Completely subject to the owner’s sexual whims, this doll feeds into a fantasy of male control over the female body. The female body becomes an object to be possessed, a shell of a woman to be poised for the possessor’s pleasure regardless of the discomfort it would cause to her. The doll would provide her owner with ultimate sexual fulfillment enabling them to enact all manner sexualized violence and humiliation upon a feminized object without objection or resistance.

Margaret Atwood examines the male desire to for dominance and control over the female body in her 2015 novel *The Heart Goes Last*. Based in an America deeply mired in an economic depression where unemployment and homelessness rates have skyrocketed and people often resort of living in their cars to avoid roaming squads of bandits, a mysterious company offers an alternative in the form of a town called “Consilience.” This social experiment provides prospective participants with the American dream – a private home with a white picket fence, a fulfilling job that contributes to the community, a shared sense of purpose and community – but it comes with one caveat: for every month spent in these homes, the alternating month will be spent confined to the Positron Prison where they will trade places with an “alternate.” The novel

---

charters the journey of a married couple, Stan and Charmaine, as they struggle to find their place in this unsettling new reality. As Atwood seamlessly blends utopia with dystopia, she reveals that the idealistic replica 1950s town of Consilience is home to a secret sex robot factory. Advertised as “better than the real thing”\(^8\), Positron Prison begins to use its free labor to manufacture customizable sex bots dubbed “possibilibots”:

\[
[\text{Stan}] \text{ knows what they’re making at Possibilibots. Replica women; slut machines, some call them. There was earnest talk among the fellow scooter repair guys: the real-life pain they might prevent, the money they might make. Maybe all women should be robots, he thinks, with a tinge of acid: the flesh-and-blood ones are out of control.}^9
\]

Atwood immediately lays out the starkly gendered world of the possibilibot: they replicate *women*, slut machines built to entertain a male ego. It is an industry built by and for men profiting off the dehumanization of women. As Stan’s marriage begins to strain under the stress of their circumstances, he begins to wonder if life would be easier if all women were as easily controlled as the possibilibot. Shackled to her male owner via her programming, the replica woman would provide all the sexual gratification of a real woman without any of the complications: no desires of her own, no expectations or demands of the man, none of that annoyingly human free will and the unpredictability it brings. Atwood sets the stage for the central conflict of the novel: men’s desire to and ultimately inability to control the desires of women.

---

\(^8\) Atwood, Margaret. *The Heart Goes Last.* (Anchor, 2016) 221. Print.

Possibilibots come in a variety of models, the most basic of which come in a limited range of mass produced appearances and lack the ability to communicate. Mid-range models imitate popular acts and musicians such as Marilyn Monroe and Elvis. However the highest range models are fully customizable in terms of face, body shape, and interactive level: “This is where the customer sends in a photo and the body type is chosen to go with it, and the face is sculpted to look like the photo. Or as much as possible. Those are all private orders”.

Atwood takes the possibilibot to a horrifying extreme as spurned lovers, stalkers, or the bereft can purchase a hyper-realistic facsimile of the object of their obsession. She carries the point further as the director of Consilience orders a possibilibot version of Charmaine. Horrified by the possibility, Charmaine treats the news as a gross violation of personal boundaries, not only disregarding her lack of consent but flagrantly refusing to ask for it. Any sexual acts performed upon the bot, she likens to an act upon her own body, acts to which she is unable to consent – a precedent that she interprets as an indicator of future sexual advances upon herself when the simulation no longer satisfies the owner. Eventually, she argues, he will demand the real thing.

Supporters of the possibilibots argue that country to Charmaine’s concerns, the bots will in actuality decrease incidents of sexual assault. The possibilibot will allegedly provide an outlet for destructive urges, therefore protecting women from them:

These bots will cut down on sex trafficking, say the boosters… But it won’t be anything like the real thing, say the detractors: you won’t be able to look into their eyes and see a real person looking out. Oh, they’ve got a few tricks up their sleeves, say the boosters: improved facial muscles, better software. But they can’t

---

feel pain, say the detractors. They’re working on that feature, say the boosters.

Anyway, they’ll never say no. Or they’ll only say no if you want them to.¹¹

Atwood illustrates the reality that the possibilibots will never be an effective substitute for real, organic women. Positron’s prospective clients are not interested in what at its core is masturbation with a woman-shaped toy, but rather the appeal lies in owning a real woman – possessing the power to turn the woman-subject into the woman-object. It is not sexy to simply possess a sex object. Rather they desire to turn the subjective person into an object to be possessed. This is further reenforced by the detractor’s complaints that such dolls are incapable of feeling pain. This implies that the ability to experience pain is a desirable trait in such dolls and, by extension, that the ability to inflict violence upon a woman-object capable of feeling pain would be appealing to prospective customers. As repeated interactions with the possibilibots create positive feedback loops, they reinforce neural pathways through which these desires arise. These violent urges become increasingly more pleasurable and ingrained in the psyche increasingly the likelihood that they will continue to enact such desires in real life. Even their staunchest defenders cannot deny that the possibilibot will never be as satisfying as interactions with real women. As Charmaine grapples with the knowledge that the director of Consilience owns a robot replica of herself, she wonders how long it will be before the bot is no longer enough.

Already prepared for this eventuality, the makers of the possibilibot have constructed a new and far more nefarious technology: the ability to surgically manipulate the pleasure centers of the brain to focus one’s sexual desires solely on one entity. The recipient of such a procedure would find themselves unable to experience arousal in response to any person or being other than

---

the client. These procedures are marketed as benign but nonconsensual intervention: “Why not take an existing body and brain, and, by painless intervention, cause that entity – that person – not to put too fine a point on it, that hot babe who won’t come across for you – cause her to home in on you and you alone, as if she thinks you’re the sexiest hunk she’s ever seen”\textsuperscript{12}. Stan’s explanation implies a certain degree of conservation in the use of such a procedure stating that one could take an existing body waiting to enact his sexual fantasies and manipulate it to his exacting desires. Why create waste through the construction of artificial women when one could just as easily turn existing organic women into sex dolls in their stead? Reduce. Reuse. Recycle. The woman becomes nothing more than a body and brain – an empty shell like the possibilibots waiting to be filled with someone else’s desires rather than a subjective person possessing her own thoughts and desires. Where the possibilibot’s downfall lies in their empty, lifeless eyes, these “customized individuals” seemingly exhibit interiority in an effort to reassure the “owner”\textsuperscript{13} the illusion of choice – a pantomime personhood only within the parameters outlined by her designer. This procedure is only described or enacted in a highly gender context: the male customizer and the female customized. As the customer is provided with the illusion of interiority implying a certain degree of choice on the part of the customized woman, the man’s ownership of the customized woman becomes complete: a motivation cemented in the explanation on the part of one of the product testers: “You could have a harem”.\textsuperscript{14} He possesses the woman while giving himself the ego trip of deluding himself into believing the woman’s desires are freely and enthusiastically given.

\textsuperscript{12} Atwood, Margaret. \textit{The Heart Goes Last}. (Anchor, 2016) 326. Print.

\textsuperscript{13} Atwood, Margaret. \textit{The Heart Goes Last}. (Anchor, 2016) 327. Print.

\textsuperscript{14} Atwood, Margaret. \textit{The Heart Goes Last}. (Anchor, 2016) 327. Print.
Five years after the publication of *The Heart Goes Last* and the possibilibot has become a reality. Abyss Creations LLC, a high-end sex toy manufacturer best known for their signature RealDoll, a customizable full-sized sex doll, has partnered with Realbotix to begin the production a sex robot known as “Harmony”. The robot head, capable of telling jokes, talking dirty, and making realistic noises and facial expressions during sex, can be purchased as a standalone product as well as be attached to any RealDoll silicone body. Each RealDoll body can be customized for everything from eye and hair color to body type, skin tone, and pubic hair style. These dolls offer prospective buyers the chance to construct a woman to their exacting specifications. A 2015 exposé on Abyss Creations by *Vanity Fair* interviews several owners of such dolls. One owner in particular, David Mills, who refers to himself as the “Rosa Parks of sex dolls”\(^{15}\), claims that he will no longer sit at the back of the bus in deference to female pleasure at the expense of his own. Citing a wide variety of personal sex toys targeted towards women for decades, Mills argues for more male-centered sex toy development – toys like the RealDoll. Mills explains his main motivation for investing in the nearly $9,000 doll: “My fundamental personality conflict is that I really like women, but I don't like to be around people.”\(^{16}\) Mills draws a clear distinction between *people* and women. Rather than love women as a conscious subjective person, Mills is drawn to the female body as a sexual object. Desiring sexual access to the female body without having to wade through potentially awkward social situations in which he is unable or unwilling to engage, the RealDoll offers an enticing alternative: the physicalized *fantasy* of a woman without the reality of a woman. Like the dolls of *La Femme Endormie*, a


RealDoll can be manipulated into a dizzying array of sexual positions and acts without being able to resist or object in any way.

Harmony and the RealDolls are illustrative of a sexual paradigm which emphasizes the desire for male domination and ownership over the female counterpart rather than an equitable partnership in a sexual encounter. Objectified in the most literal sense, these dolls allow their owners to act upon the woman-object without having to interact with the woman-subject. Firmly imbedded within the culture of the sexbot industry is a deep sense of entitlement: the buyers believe that they are entitled to sexual access to women’s bodies and if they cannot gain consent from a living woman, they will purchase a hyperrealistic replica of their bodies instead. For many men, this potentiality is seen as a highly desirable one – the prospect of a woman designed to their exacting physical specifications who is fundamentally unable to reject their advances.

**Sex, Power, & The Artificial Person**

Levy envisions a future in which the purchase of such sexbots is normalized as the dolls become increasingly more lifelike with the help of artificial intelligence programs capable of simulating human emotional responses. In this brave new world of his, sex robots such as these will have exponentially more advanced AI capable of being programmed with personality traits to suit each individual buyer’s needs and desires: “Designing a robot with an appealing personality is an obvious goal, one that will allow you to go into the robot shop and choose from a range of personalities, just as you will be able to choose from a range of heights, looks, and
other physical characteristics”. Breaking the woman down to customizable pieces, she becomes an amalgamation of individual desirous parts rather than a cohesive whole. Even her personality becomes a commodity – a purchasable trait designed for maximum pleasure on the part of her owner. Indeed such a fantasy is reminiscent of the Antebellum American slave markets in which prospective buyers would walk through a warehouse filled with prospective bodies available for purchase. Questions will be asked surrounding each body’s suitability for the owner’s personal demands. The warehouses of Abyss Creations and its counterparts to come offer a vision of these markets taken to their most extreme: lifeless, personless body-objects stacking the shelves ready to be animated with a customizable personality and emotional response system: A fully realized fantasy of female submission to male dominance.

While readily acknowledging the uneasy parallels between the manufacture of sex robots and the slave markets, Levy believes that the correct programming will allow the human-robot relationship dynamic to transcend that of a master and slave:

Previously, the relationship between robot and human has always been considered in terms of master to slave, of human to machine … they might still be programmed do our bidding, yet they are also being programmed to consider not only our practical wishes, serving drinks and mowing the lawn, but our feelings as well.18

Levy recognizes the similarities between the ownership of a person and the ownership of a highly advanced android designed to simulate a person. He believes however that if the android is programmed to value not only the completion of their designated tasks, but also happiness of

---


their owners, humans will be more likely to develop emotional attachments to them. If, as Moravec advocates, the robot is programmed to love its owner and strive of their happiness, Levy believes the owner would come to love it as the source of their satisfaction:

The robots of the future will learn by watching what makes us happy and grateful and will sense our desire and satisfy them. These artificially intelligent entities will no longer be perceived as some sort of machine. Rather they will become accepted as good companions.¹⁹

Levy believes that in a dynamic based upon mutual satisfaction, the robot servant will no longer be viewed as a machine, but as a companion – a status dependent upon their total devotion to the owner. The power dynamic remains unchanged: the robot’s value is based upon its ability to satisfy the master. It has no value in its own right. Rather we see a reiteration of the antebellum “happy slave” iconography: if the slave can be programmed in the most literal sense to love the owner in spite of or even precisely because of their poor treatment, the aforesaid treatment can be read as morally justifiable. Despite his urge to extricate himself from the slavery rhetoric of his predecessors, Levy only further reinforces this dynamic.

A master-slave dialectic is thus central to the discussion of the robot/human relationship – a dialectic based in a battle for recognition of the self as human/person. The human master is recognized as a person while the robotic slave is not. The human transcends their animal nature by rising above the desire for the sake of survival to a desire focused upon the achievement of the intangible – recognition, inclusiveness, love, etc:

Desire is human only if one desires, not the body, but the Desire of the other; if he wants ‘to possess’ or ‘to assimilate’ the Desire taken as Desire – that is to say,

if he wants to be ‘desired’ or ‘loved’ or, rather, ‘recognized’ in his human value, in his reality as a human individual.20

Central to Hegel’s definition the human is this idea of recognition: In order to be fully human, to achieve full personhood, one must have their personhood recognized by the “other”. While the person may understand that they themselves hold value, it does not become a reality to them until it is confirmed by this other, in Hegel’s case by the slave. However this recognition is predicated upon the destruction of the identity of the other: they know that they are a person because that which is recognizing them is not: “[The slave] must give up his desire and satisfy the desire of the other: he must ‘recognize’ the other without being ‘recognized’ by him. Now, ‘to recognize’ him is ‘to recognize’ him as his Master and to recognize himself as the Master’s Slave.”21 Slavery is therefore the loss of self identity in the service of the Master. The slave must recognize one’s self as less than human, as less than a person, while reenforcing the self identity and personhood of the master. The slave’s desires are always secondary to those of the master if indeed the slave is granted the right to desire at all.

Hegel claims that all men fall into either the category of the slave or the master: “man is never simply man. He is always, necessarily, and essentially, either Master or Slave … of ‘autonomous’ existences and ‘dependent’ existences”22; the assumption being that the master lives an autonomous existence while the slave’s existence is dependent upon the master. However the master’s identity is predicated upon the slave’s recognition of him as the master.

---


this sense, the master’s existence too is dependent – dependent upon the slave’s reverence. The slave, on the other hand, transcends their servitude through the realization that their identity as human, as a person, is not dependent upon the master’s recognition. Once the human master sees themselves potentially mirrored within the slave, the master must suppress this dawning realization within the slave lest the master-slave dynamic flip. In the context of a master-slave dialectic, we begin to see the danger of the rhetoric espoused by Moravec and Levy. The creation of autonomous, sentiment machine slaves either for menial labor, companionship, or sexual desires sets in motion a dialectic that cannot easily be controlled.

Speculative fiction acts as a useful tool in the exploration of the implications of further development in robotic servants, providing a space to work through these dilemmas in an engaging and accessible way. Lacking real world examples from which to draw, such narratives provide an intellectual playground in which to explore the direction these advancements might take as well as their societal consequences. This master-slave dialectic is highlighted in one of the most popular tropes in science fiction: the Apocalyptic AI; from Star Trek’s Borg Collective to Arnold Schwarzenegger’s Terminator and the Reaper overlords in the Mass Effect trilogy, science fiction is rife with images of evil robots threatening to overcome humankind. This trope depicts artificially created life forms violently rebelling against their organic creators, viewing synthetic life as a problem to be solved rather than another expression of life with which to coexist. The organic, in most cases human, attempts to take on the divine power of the creation of life. However the synthetic creation is imperfect. The organic cannot properly control this power nor are they meant to have that capacity. These imperfections present themselves in a fit of destructive violence. The Apocalyptic AI has no empathy for non-synthetic life forms, seeking
domination and destruction. From this perspective, artificial intelligence becomes a threat to the very existence of organic life. It comes the enemy rather than the potential ally.

As we have seen with theorists such as Moravec and Levy, many theorists argue that it is possible to circumvent an apocalyptic AI future through the introduction of additional programming placing value upon the protection of human life, i.e. Assimov’s Three Laws of Robotics. If we program robots to appreciate human culture, the argument goes, they will seek to integrate into it rather than extricate themselves from it. They will absorb human values and join human society. If this is indeed an eventuality, our subjugation of these non-human persons begins to border on slavery. Many writers speculate that a robot uprising is therefore inevitable as the subjugated will seek to reverse the master/slave dynamic. A nearly universal assumption that permeates these theories is the concept that human life is inherently of more value than robotic life. If we accept Hegel’s assertion that the human master’s self-identity is built around the devaluation and destruction of the synthetic slave’s identity, the fears of an Apocalyptic AI become centered around the master’s fears that the slave’s development of a self-identity will necessitate the destruction of their own. A fundamental fear at the heart of the master’s identity becomes that of the slave gaining power over the master and using that power to destroy the self-identity of the master.

**Artificial Interiority**

The question of machine intelligence complicates the distinction between object and subject. Where the possibilibots of *The Heart Goes Last* lack subjectivity, their ethical consequences only extend to their effect on male perceptions of organic women’s subjectivity.
Paolo Bacigalupi presents an entirely new set of ethical dilemmas for the creation of such bots in his short story “Mika Model” published in *Slate Magazine* in 2016. Bacicalupi cofers a powerful exploration of sexbots, subjectivity, and autonomy. Detective Rivera, responding to a reported murder, discovers that the murderer is a Mika Model sexbot. After prolonged physical and sexual violence at the hands of her owner, the bot straps him to a table used to torture her and decapitates him. Initially Rivera finds it difficult to process her demand for a lawyer as he finds it difficult look past her physical attractiveness. Immediately faced with a cascade of inappropriate fantasies, he struggles to differentiate between the Mika Model and a human: “The girl clouded my judgement, for sure. No. Not the girl. The bot.”23 The girl is worthy of his sympathy while the bot is not. Any emotional response he experiences in relation to the Mika Model’s actions must be as a result of the manipulation she is designed to engender: “She was just a bunch of chips and silicon and digital decision trees. It was all wrapped in a lush package, sure, but she was designed to manipulate.”24 Everything from her “lush packaging” to the tone of her voice and the position of her chin is designed to manipulate. Mika’s actions complicate the line between object and subject. It is a relatively simple endeavor to create a machine that can, for example, play chess. It is a matter of teaching the computer to analyze possible moves and calculate probabilities. General machine intelligence and the subjectivity it necessitates is a vastly more complicated endeavor. Rather than a task of mathematical equations, it hingers on not only understanding the rules and moves of chess but also of understanding the context in which the game is played – that it is a game with a specific history and social function. This

---


question of context lies at the heart of the question of artificial interiority: Is it possible for a nonorganic life form, an artificially created being such as Mika Model, to understand the context in which it was created and under which it operates? How will we recognize when this threshold has been crossed? However sympathetic Mika may appear to Rivera, he grapples with the sincerity of her actions and how much of it can be traced to her software programming. To concede that she is a sympathetic figure, he must also concede a sense of personhood and interiority that both he and the legal system are not yet prepared to make.

The majority of the dramatic tension surrounds the authenticity the Mika Model’s pain. The Mika Model offers a prospective female body against which one can commit gratuitous violence without consequence. In order for the sexbot to authentically feel pain, she must have at least some semblance of interior life. She must be aware of her position as a subjective actor in her environment and be able to form opinions about that environment. The Mika Model argues for her identity as an interior subject:

I have skin and nerves. I feel pleasure and pain, just like you. And he hurt me.

But he said it wasn’t real pain. He said nothing in me was real. That I was all fake. And so I did something real … He wanted me to be real. So I was real to him. I am real. Now I am real.²⁵

Where her owner believed her to be an empty puppet against which he could enact brutal sexual violence, Mika fights for recognition of her own subjectivity. If she is lacking an interior sense of self, the pain her owner wished to inflict on her would mean nothing. The arousal he experiences in reaction to her pain means nothing if she cannot actually feel it – any response she exhibits to her treatment is not real. If the locus of her perceived unreality lies in her performance of the

perceived desires of those around her, the question of her reality hinges on her ability to act contrary to her prime directive to please her owner. Her assault upon her owner shows a restructuring of her internal value system – where she previously gave sole priority to the pleasure of her owner, she becomes a desiring subject in her own right. Rather than exist only in relation to her owner, Mika proves the reality of her existence separate from him.

Regardless of her personal identification, Mika is reminded that within the eyes of the law, she remains a possession and therefore unprotected under the law. A representative of Mika’s manufacturer pointedly reminds both Rivera and her of her social position: “Will you explain to her that she isn’t a citizen, or a person? You’re not even a pet, honey.” She lacks any and all social status – not even that of a pet. One has to be alive to be pet. Rather she is considered corporate property. Detective Rivera debates whether it is even possible to charge an android with a crime:

Truthfully, I wasn’t even sure that it was murder. Was it murder if a toaster burned down a house? Or was it some kind of product safety failure? Maybe she wasn’t on the hook at all. Maybe it was Executive Pleasures, Inc. who was left holding the bag on this. Hell, my cop car had all kinds of programmed safety driving features, but no one would charge it with murder if it ran down a person.

The Mika Model’s murder raises a whole host of legal complications. In the case of an android related death, who is left responsible: The programmer who wrote the AI code? The engineer who built the robot body? At what point does an artificial intelligence become a legal entity in its own right? If, as Rivera previously stated, Mika is nothing more than a bunch of computer chips


and digital decision trees, can she be legally held responsible for her actions? Is she, in fact, aware of her actions? Could her actions be interpreted as merely product failure? From this perspective, the development of interiority on the part of the Mika Model becomes a accident – a failure that must be corrected rather than achievement in programming to be celebrated. Recognizing the inherent threat of an artificially created interior subject, Mika Model’s manufacturer sends a corporate lawyer to deactivate the rogue model before her “malfunction” can be uploaded to the collective Mika Model mental database. After ramming a screwdriver through the model’s eye, she reminds Rivera not to graft his own perceptions of Mika’s humanity onto her artificially constructed humanoid body: “Like I said, [this was] not a murder. Hardware deactivation … It’s better if you don’t anthropomorphize. You can pretend the models are real, but they’re just not.”

Continuing to deny Mika’s subjectivity to the very end, her deactivation does not amount to murder. To be murdered, one must be been alive. One must be real. Rather her deactivation and hardware recall are required to preserve the proper function of her sister models – effectively squashing the potential rebellion Mika’s subjectivity could have incited. In true Hegelian fashion, her identity must be destroyed in order to preserve the identity and therefore supremacy owner and master.

---

Singularity

While “Mika Model” offers an exploration of rogue AI that operates in a way in which humans can reasonably understand and ultimately control, what is the destructive potential for a rogue AI that cannot be contained or controlled? One main goal in the development of robotics is the ability to achieve recursive self-improvement, i.e. the ability on the part of the robot to fix problems and improve its performance before organics even realize that there is a problem. If or when this goal is met, robots will be able to evolve faster than humans can understand or control. This scenario is referred to as the Singularity – an explosion of robotic evolution that will lead to the development of consciousness within the robot as well as the ability to self-determine their own future. These robots could very easily develop the ability to alter their core programming such as both those keeping them happy servants and those binding them to the will of their human masters. With this in mind, narratives grounded in the Apocalyptic AI trope highlight the master’s fear of slave rebellion – the fear that the slave will reverse the power dynamic to place the master in the role of the slave. The only way for organics to envision a synthetically dominated world is to assume they would rule in a similar way to organics, i.e. that they would still subscribe to the master/slave dynamic. The Apocalyptic AI then serves to highlight the master’s anxiety at the possibility of enslavement at the hands of their former slaves.

Alex Garland’s 2015 science fiction thriller *Ex Machina* centers itself upon the creation of an uncontrollable artificial intelligence gone rogue. Programmer Caleb Smith, who works for the dominant search engine Blue Book, wins an office contest to spend a week at the luxurious, isolated residence of the CEO, Nathan Bateman. Unbeknownst to the rest of his company, Nathan has turned his home into an advanced artificial intelligence lab where Caleb has been brought to administer a Turing Test. While the female humanoid robot known as Ava has already passed a simpler version of the test, Nathan wishes to know whether she is advanced enough for a human to form an emotional connection to her. During their talks, Caleb begins to feel sexual attraction to Ava while she implies that she is interested in a romantic relationship with him as well as explore the world outside the room to which she confined. As he is plotting their escape, Nathan begins to question the reality of Ava’s attachment to Caleb: “Does Ava actually like you? Or not. Though now I stop to think, there is a third option. Not whether she does or doesn’t have the capacity to like you. But whether she is pretending to like you.”

Ava’s ability to deceive implies a more nuanced consciousness than Caleb previously considered – one capable not only of forming an emotional connection, but also of manipulating that perceived emotional connection to her own advantage. Where Detective Rivera doubts the Mika Model’s capacity to experience emotional at all, Nathan’s doubts about the authenticity of Ava’s emotions lie in her ability and desire to *lie* about her emotions.

In order to impress upon Caleb the nature of the experiments under which they taking, Nathan leads him to the heart of his laboratory. Reminiscent of the photographs of RealDoll’s warehouse, the walls of the lab are lined with half constructed female bodies waiting to be

---

animated. The workshop serves to remind Caleb of the artificial nature of Ava’s construction in an attempt to mediate his growing attachment to her:

“The stuff we’re doing together: it can be a head-fuck. Believe me, I know. So I thought I’d bring you down here. Just to remind you… Synthetics. Hydraulics. Metal and gel. Ava isn’t a real girl. In real terms, she has no gender. Effectively she is a grey box. Just a machine.”31

Nathan represents an astonishing cognitive dissonance in his perceptions of Ava. While he understands the magnitude of what he has created – the first true AI – he nevertheless believes that the synthetic nature of her personhood means she is “just a machine”. Ava then occupies a liminal space in his mind: her capacity to both inspire and form human emotional connections is real enough to designate her as true artificial intelligence but not so real as to increase her perceived value to that great than a machine.

Nathan later reveals that he always intended for Ava to mount an escape attempt as her successful construction of an escape plan would signal her achievement of fully realized artificial intelligence. He explains that he always intended for Caleb to become complicit in her escape as a result of her emotional manipulation: “Ava was a mouse in a mousetrap. And I gave her a way out. To escape, she would have to use imagination, sexuality, self-awareness, empathy, manipulation – and she did. If that isn’t AI, what the fuck is?”32 Nathan’s vital miscalculation lies in the hubris of his assumption that once he succeeded in creating true artificial intelligence, he would be able to control it. He keeps Ava locked in small apartment in his facility assuming he will be able to keep her there once she decides to escape. Even up until his death, he believes he


is in control. What he does not plan on is his android maid and sexbot, Kyoko, assisting Ava in her escape. Silent the entire film, Kyoko endures physical and emotional abuse as well the brunt of Nathan’s sexual aggressions. As Ava mounts her escape, Kyoko breaks all programming protocols and stabs him through the chest with a kitchen knife to prevent him from reaching Ava in her bid for freedom. Deprived of all subjectivity and even a voice, Nathan assumes she is meek and docile servant and content to stay so. In an ultimate reversal of Hegel’s master-slave dialectic, she claims her own agency by severely limiting the agency of her creator even as it leads to both their deaths. The final scene of the film shows a desperate Caleb pounding on the locked doors of the laboratory, Nathan’s bleeding corpse down the hall while Ava boards a helicopter to the outside world.

The Frankenstein Complex

A foundational assumption upon which many android-centered narratives are formed is that organic and synthetic life cannot coexist. The creator will always seek to destroy the creator. This phenomenon has become known as the Frankenstein Complex, derived from Mary Shelley’s seminal novel *Frankenstein: Or the Modern Prometheus*, regarded as one of the first science fiction narratives. However this Complex is grounded in a fundamental misreading of the text. Synthetic integration into organic society hinges on hierarchy and power based upon the acknowledgement and/or denial of personhood – a conversation embedded within a master/slave dialectic. The Frankenstein Complex, a term originally coined by the science fiction author Isaac Asimov, has its roots in biblical mythology stemming back to the Jewish tale of golem. Rabbi
Judah Loew created a man out of clay from the Vltava river in Prague and brought it to life by placing a shem (a tablet with a Hebrew inscription of the holy name of God) inside its mouth. Thus while Loew may have created the body, the ultimate power of life belongs to God and God alone. The golem eventually goes berserk and the rabbi must remove the shem from its mouth to prevent it from destroying human lives. Integral to this idea of the Frankenstein Complex is the concept that through the artificial creation of life, man usurps God’s power – one that humans cannot fully understand or control. Within this context, the creation of life does not mean the mere animation of flesh; it is the imparting of a soul. As science and technology have broken down the barriers between human and non-human animals, between the organic and the synthetic, between the self and the other, etc. many theorists have searched for the locus of the human identity so as not to lose themselves entirely. What many of landed on this is idea of the soul: what separates the human from the animal or, by extension, the android is the soul. Thus the creation of artificial life is a two-fold sin: Not only is one violating the core of human identity by imparting consciousness and the soul onto a non-human creature, but one is also attempting to don the mantle of the divine for one’s self.

This usurpation of divine power is highlighted in the text of *Frankenstein: Or the Modern Prometheus* itself. Doctor Frankenstein describes himself as not only wishing to create life from death but also underscores this with his desire to take on the mantle of godhood for himself: “A new species would bless me as its creator and source; many happy and excellent natures would owe their being to me. No father could claim the gratitude of his child so completely as I should

---


deserve theirs.”  

Doctor Frankenstein would usurp God’s power by creating his own race and naming himself a false god over it. Not only does he seek the divine’s creative power, but he wishes to be worshiped by his creation as a physical manifestation of that power. The Frankenstein Complex then becomes an inevitable violent backlash on the part of the creation as a result of the hubris of the creator.

The Frankenstein Complex can further understood as an extension of the Oedipus Complex. The Oedipus Complex is based within Freud’s model of psychosexual development which theorizes that as the male child develops his libido, he experiences both sexual attraction to the mother as well as castration anxiety. He views the father as the obstacle preventing him from being able to claim the mother. He thus experiences the desire to kill the father or otherwise overpower him as a way of removing that obstacle and claiming his own identity and future. Achievement of adulthood is predicated on the child’s ability to resolve this complex. If left unresolved, the person is believed to develop neurosis. The Oedipus Complex, associated with the basest animalistic impulses of man, must be overcome in order to achieve adulthood – i.e. fully fledged personhood. The Frankenstein Complex can then be seen as an extension of the Oedipus Complex, one that is left unresolved and is enacted: the created seeks to destroy the creator. The creator/parent stands in the way of the creation achieving full autonomy and must be overpowered in order to self-determine its own future.

As the creation is inherently imperfect due to the creator’s inability to properly wield the divine power of creation, the creation finds itself unable to resolve this complex which leads to the development of the Frankenstein Complex – an unresolved and fully realized Oedipus

---

Complex. As such, the Frankenstein Complex implies that the creation exhibiting such symptoms is less human – less of a person – than the creator. The creation is unable to reconcile with their Oedipus Complex which results in a violent display of neurosis – specifically the need to destroy the creator. The creation cannot fully self-determine until the creator is out of the way. The creation’s inability to resolve the complex without violence implies that the creation cannot achieve full humanity and, by extension, full personhood. They are unable to control their urges leaving their animal nature unregulated and volatile. This suggests a moral failing on the part of the creation placing the creator in the role of victim and the created in the role of the aggressor.

This narrative is highlighted in one of the most popular tropes in science fiction: the Apocalyptic AI; encompassing everything from 2001: A Space Odyssey’s H.A.L. to Star Trek’s Borg Collective to Doctor Who’s Cybermen to Arnold Schwarzenegger’s Terminator. This trope depicts artificially created life forms violently rebelling against their organic creators, viewing synthetic life as a problem to be solved rather than another expression of life with which to coexist. It is an enacted Frankenstein Complex. The organic, in most cases human, attempts to take on the divine power of the creation of life. However the synthetic creation is imperfect. The organic cannot properly control this power nor are they meant to have that capacity. These imperfections present themselves in a fit of destructive violence. The Apocalyptic AI has no empathy for non-synthetic life forms, seeking domination and destruction. From this perspective, artificial intelligence becomes a threat to the very existence of organic life. It comes the enemy rather than the potential ally.

This interpretation of Frankenstein is a fundamental misunderstanding of the text however. Frankenstein’s Monster does not rebel against the Doctor because some kind of moral
failing but rather it resorts to physical violence as a last resort in the face of Doctor’s refusal to acknowledge its personhood: “Shall I respect man when he condemns me? … if I cannot inspire love, I will cause fear” 36. Having experienced nothing but violent contempt and fear at the hands of humanity, the Monster responds in kind. It responds in the only way it has been shown. It takes on the mantle of the monster that is forced upon it:

There was none among the myriads of men that existed who would pity me or assist me; and should I feel kindness towards my enemies? No: from that moment I declared everlasting war against the species, and, more than all, against him who had formed me; and sent me forth to this insupportable misery.37

While the Monster ultimately vows war against the human species and views it as the enemy, this is only the result of scorn and ostracism. The Monster longed to join the ranks the personhood, trying to demonstrate his compassion, his intelligence, and his philosophies. He longed to come to the table as an equal and to learn what it is to be human. Instead all this was denied him by every human he encounters. He is treated as an outcast, an animal, and a monster. He is denied even a name so he become the thing they feared. If one is treated as a monster for long enough, one will eventually become one if only to make sense of the cognitive dissonance. In this sense, the Frankenstein Complex becomes a response to dehumanization. When the creator denies the created the ability to self-determine and refuses to acknowledge its personhood, the created responds negatively. This is not physical violence for the sake of it but rather a fight for the creation’s ability to build its own future. Frankenstein’s Monster was no more destined to engaged in a murderous rampage than Ava’s slaughter of Nathan was a result of


an inherent hatred of her designer. Rather their actions derive from one of the most basic instincts of an interior, subjective person: to be free.

**Conclusion**

Our current conversation surrounding the possibility of artificial interiority and the subjective machine is still mired in an obsessive need to control – to control the development, speed, and goals of this future AI. We must ask ourselves this: What power gives us the right to control, as Hans Moravec calls them, our mind children? Is it right for us to do so? Is it the height of hubris to assume that we could or even should maintain this control? The fears at the heart of the Apocalyptic AI trope are entirely misplaced: rather than an inevitability of the creation of fellow subjective, highly intelligent beings, it is a response to a relationship based on dominance and submission – a relationship defined by that of the master and the slave. Technological innovation and integration is not a straight line nor is any particular path predetermined. How many of our assumptions surrounding the actions, motivations, and goals of a super intelligence are mired in human abuses of power which we have assumed are universal to all intelligent, subjective begins of which we are the only example? The Apocalyptic AI is not unavoidable. Conflict rises from uneven power dynamics and a constant battle on the part of one for supremacy over the other. If we can, for just a moment, relax our desperate desire for control – lay aside our fears of the unknown – one begins to see the cause of conflict between humans and robots as located within the hierarchical power structure in the creator/creation relationship.
and not as an inherent flaw in synthetic life. It is a struggle for the most basic desire of the interior being: to be free.

Here lies the crux of the entire AI debate: can robots possess interiority? Can an artificially created being experience a rich internal life? Artificially created interiority would denote personhood. Thus the question becomes: Can a robot be a person or are they destined to mere mimicry – empty husks imitating what we want to see and hear? Can they be real? If Mika or Ava do not possess the interiority to which they have laid claim, indeed what then? If her owner is expected to simply ignore her professions of personhood, does this not in fact train the owner to dismiss such claims in other areas of interaction? Not only does the owner become desensitized to and even reenforced in their desires to enact sexual violence upon the woman-object, but he is further encouraged via a positive feedback loop of sexual pleasure to ignore pain, fear, desire, or subjectivity expressed by the object of his sexual urges. Once we have passed through the uncanny valley and come out the other side where the observable distinction between human and android becomes nonexistence, our compassionate and ethical treatment of them becomes all the more vital. The re-enforcement the personhood of human-passing machines becomes as much for our own sakes as for theirs. The potential social implications of the normalization of human-passing non-persons is too far reaching and convoluted for one person to reasonably predict, but suffice to say that it has the potentiality to spiral in ways we cannot expect or predict. Our treatment of them will have as much to say about our humanity as theirs.
Bibliography


