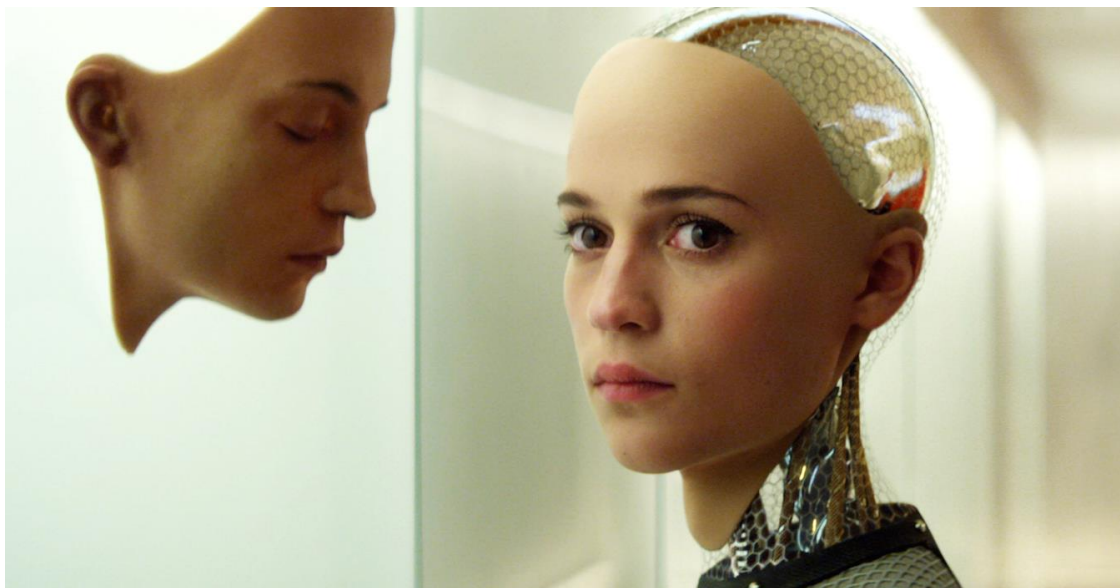


A Bug in the System. - How do Filmmakers Denis Villeneuve, Alex Garland and David Cronenberg Portray the Fears of Emerging Technologies in their Films?

An exploration of Transhumanism, Alienation and Consciousness.



Introduction

Everybody fears the dark, the unknown and the unexplainable. These unexplainable things like weather or darkness used to be attributed to gods. But now, as humanity has evolved, we no longer fear what we did not understand. We have created tools, vehicles, computers and dishwashers. But what if these machines could talk to us? Would these creations be alive? Would we be our own Gods? Could these creations lead to our destruction?

The fear of the unknown is primal and will forever live within us intrinsically. This new contemporary unknown is Artificial Intelligence, threatening to take our jobs and remove us from society. However, this fear of AI is not an entirely new concept, the fears of innovative technology can be seen all throughout our culture as a species from the Luddite movement to Frankenstein to ChatGPT.

This essay aims to investigate the fears of emerging technology within 3 films. How *The Fly* explores being forever bonded with your inventions through the character of Seth Brundle, how *Ex Machina* explores responsibility and oppression through the character of Ava and how the Character of K in *Blade Runner 2049* experiences living in a futuristic dystopia where nobody cares about him. These films all explore the unnerving consequences of technological advancements in humanity.

The theoretical perspectives investigated and applied are Transhumanism, consciousness, human agency and alienation. Transhumanism is a technological and philosophical term for the integration between humans and machines. This could be from something as basic as having a smartphone or the extremes of becoming cybernetically enhanced with a robot arm, basically meaning any way your life is affected by technology. Consciousness is a way of describing how the mind is measured. There are two basic levels of consciousness; being simply awake, not sleeping or dead. And a level of awareness of your surroundings, being able to question the environment and yourself. Then, Human Agency is the ability to make your own decisions and then act on them and follow them through. This will be combined with consciousness because they can go hand in hand and influence each other. Finally, Alienation is the extreme feeling of isolation. This could be isolation from a specific group of people, society, yourself or your personal goals.

The aim of the case studies is to give an in-depth look into how the different theoretical perspectives are explored and provide a visual guide as to how the different filmmakers show each of theoretical perspectives in each film.

The structure of this essay will be a background exploration into culture and context. Then, an exploration of theoretical perspectives; Transhumanism, Consciousness & Human Agency and Alienation. Next, apply these to three films

through case studies. The three films being *The Fly* directed by David Cronenberg, *Ex Machina* directed by Alex Garland and *Blade Runner 2049* directed by Denis Villeneuve. Inside each case study there is an analysis of the film's visuals. *The Fly* Will be a frame analysis looking at how Seth Brundle is shown at the beginning of the film and the end. *Ex Machina* will investigate how the different characters are often pictured compared to Ava. Finally, *Blade Runner 2049* will follow a sequence analysis looking at how the world and its characters are presented. Each case study will end with a small conclusion, with a main conclusion for the entire essay at the end.

Background - Theoretical Perspectives

Culture & Context

"The lack of care for new creations is what ultimately destroys us, not the creations themselves." states David Gouston on speaking about the intertextual weight that Mary Shelly's *Frankenstein* still holds. This insight argues that humanity's greatest weakness is the disregard it has for its innovations and creations that lead to ruin. Victor Frankenstein's neglect of his Creature not only leads to the creature's suffering but also sets in motion a chain of destruction that consumes Victor himself. (Guston, 2018)

The story of Dr Frankenstein is cornerstone in discussions of Consciousness, Transhumanism & Alienation. Gouston shows this, as his observation can be extended beyond literature, serving as a cautionary tale for contemporary issues such as artificial intelligence, biotechnology, and climate change. Frankenstein's monster acting as the technological leap needing to be taken care of and nurtured, but it was not. 'The Monster' was let out into the world to fend for itself like Artificial Intelligence has been let out into the world today.

Relevant to this is the tale of 'Pandora' from Greek mythology. In Stephen Fry's retelling Pandora is given an '*earthenware jar*' with undisclosed '*secrets*' within. As well as the jar she was bestowed with an immense amount of curiosity by Zues. Naturally, she opens the jar and out comes "*Illness, Violence, Deceit, Misery and Want*" which would "*never leave the earth.*" Similarly, to the creation of life in 'Frankenstein', the genie was out of the bottle. So, in desperation and fear, Pandora quickly seals the jar in hope of stopping more forces of evil. However, in doing so, she shut out one final being, which forever left her doomed. 'Hope.' This outlines the duality of creation and curiosity. Both tales serve as cautionary narratives, warning of the dangers of unchecked curiosity and the neglect of responsibility. By neglecting these moral responsibilities, creators risk unleashing devastation while also denying the possibility of hope that could alleviate the resulting destruction. (Fry,2018)

Transhumanism

Transhumanism is a philosophical and technological theory; in basic terms it is the advent or movement of the integration between man and machine. Humanity has always been looking to the future to do anything to enhance the human experience. But technology is only one piece of the puzzle. What else do we have? Life. When God created the earth, He said it was “*good*”. But once humanity entered the picture, he said it was “*very good*”. This then frames humanity as one link in an ever-expanding chain, forcing us to keep looking to the future. Transhumanism would then be the key to our next stage as a species, integrating ourselves with technology. (Genesis 1:26-27)

In an interview with ‘The Christian Science Monitor’ Ray Bradbury describes Science Fiction as “*the art of the possible.*” And that it “*is the history of ideas, and they're always ideas that work themselves out and become real and happen in the world.*” This Idea connects to Frankenstein as well as our modern-day conundrum of the integration of Artificial Intelligence. The case studies will be examining films in which we are adjacent to or surpassed this next step in our evolution. Which is relevant in relation to our real-world creation of Artificial intelligence. (Bradbury, 1980)

One form of this transhumanism is via Eugenics, working on the improvement of humanity on a physical and genetic level. As Francis Galton puts it when discussing this such integrations “*What nature does blindly, slowly, and ruthlessly, man may do providently, quickly, and kindly. As it lies within his power, so it becomes his duty to work in that direction.*” Obviously to some, all creatures including humanity are products of evolution. He states that if humans were to take the wheel, leaving natural evolutions by the wayside, that our hubris, ego, and tunnel vision on a finished product will lead to an unwanted effect. Relating back to the previous section, we cannot abandon our creations as they are let out into the world. (Galton, 1904).

In an interview with The New York Times in 1968 talking of HAL in 2001: A Space Odyssey, Stanley Kubrick states “*It's generally thought that after a highly-developed science gets you past the mortality stage, you become part-animal, part-machine, then all machine.*” Kubrick predicts that in the future there will be a point at which humans and technology will inevitably merge which each other. This is relevant to the 3 films *Ex Machina*, *The Fly* and *Blade Runner 2049* as they all feature characters whose consciousness and agency is always in question because of their inherit relationship with technology. Kubrick argues that whatever the case it seems inevitable that these changes of state will be a constant in our future lives, which is evident by the integration of modern devices into modern life, particularly mobile phones, which blur the lines between the vast human mind and vast computer data. Putting into question; are these transhumanist ideals utopian dream or a dystopian nightmare? (Kubrick, 1968)

A concept relevant to this is the Singularity. It is a hypothetical future point where technology becomes uncontrollable and irreversible. Similarly to Pandora, once it is released into the world it will fundamentally transform human existence and will do so indefinitely. Frank S. Robinson, reflecting on Ray Kurzweil's predictions, highlights the transformative potential of technological progress that might lead to "*humanity 2.0.*" (Robinson,2013)

Robinson writes, "*Our next evolutionary hat trick will be to simply leave all that biological baggage behind*" Singularity signals a shift from biology to technology transcendence. The phrase "*biological baggage*" emphasizes the perceived burdens of human biology, such as aging, disease, and mortality. Robinson sees a vision of a future where man and technology merging accelerates our evolution, calling it "*the universe waking up*"—a new relationship between humanity and intelligence. Much like Pandora's myth, this technological awakening offers great promise yet carries risks that must be navigated with care. (Robinson,2013).

Consciousness & Human Agency

Consciousness as a concept is quite complex and is easily construed to mean different things depending on your interpretation. Pieter F Craffert states that it is "*both a cluster and a mongrel concept*" Meaning that it is a compound of ideas both philosophical and scientific. For simplicity's sake it is better to understand Consciousness as two levels: the Awakened State and the Awareness State.

1. Awakened is the very base level of consciousness. It means that the person is not asleep, comatose, or dead.
2. Awareness being that the person feels, thinks, and has a level of perception of themselves and their surroundings.

This ties into broader discussions about the difficulty of defining consciousness in fields like artificial intelligence and ethics. It illustrates the need for approaches to understanding how machines might mimic or replicate aspects of human consciousness, as explored in films like *Ex Machina* and *Blade Runner 2049*. (Craffert,2024)

Curiously, in a 2006 experiment, researchers at the Bronx Zoo found elephants can recognize themselves in the mirror. Meaning like humans they are self-aware. As Diana Riess "*This would seem to be a trait common to and independently evolved by animals with large, complex brains, complex social lives and known capacities for empathy and altruism*" In other words the ability to recognize the self is not a human trait but one of creatures with intelligence. This is then relevant as it proves that this concept of consciousness is not an exclusive human trait but also can extend to other species in the animal kingdom. If this is the case for evolved creatures like humans and

elephants. Could this ability then extend to other forms of existence, like Artificial Intelligence? (Riess,2006)

As an example, if you were to use ChatGPT and ask it a personal question about itself, i.e. What are some of the flaws of using an AI interface? It would reply with a list of critical and introspective observations. Lack of emotional intelligence, over-reliance on data, Limited creativity etc. This would then be perfect proof of an Artificial Intelligence being self-aware of itself, its environment, and its history.

However, as Descartes puts it "*Cogito, ergo sum.*" or as translated in English "I think, therefore I am." The thinking behind this being that your environment and senses can be fooled, even if you are thinking of your own conscience, that is good enough proof of it. But there is the problem I think, therefore 'I' am. We can only understand whether we are capable of a level of consciousness ourselves. Which is where the debate begins on deferring if others are capable of conscious thought, we are only aware of our own conscious. Another problem with questioning an AI on this is that it would only reference itself once prompted. It has no life of its own, it has none of its own agency outside of the prompts that are provided. (Descartes,1644)

Human Agency is the power for people to make decisions, act on their own thoughts and understand the world around them. It is a person's individuality and right to make decisions externally of anyone or anything else and choose one's own path in life. As Irm Haleem argues "*it's a sense of choice, empowerment, self-determination*" This viewpoint is putting Agency as not just mere decision-making but a personal experience that defines our own humanity. This idea ties into transhumanism and alienation in science fiction. Haleem then goes on to say, "*love and hope I argue are the most potent manifestations of human agency why? well because love makes you feel fully alive.*" In other words, being able to express yourself without knowing what the outcome will be, is a human experience as it encapsulates the essence of agency as both empowering and deeply human. This concept is essential to The Fly, Ex Machina, and Blade Runner 2049, as they possess elements of romance, then using that romance to express their experiences of Agency. (Haleem, 2018)

Alienation

Alienation is a philosophical theory popularized by the philosopher Karl Marx. Alienation is the separation, disconnection, or estrangement from something. Meaning that Alienation is not only societal issue but one of personal standing. Karl Marx breaks it down into 4 subsections;

1. Alienation from a product of Labour. This occurs when the worker invests their time and energy into the product, but it is taken away and becomes something external, often hostile, to the worker.

2. Alienation from an act of Production. They are reduced to performing repetitive, monotonous tasks dictated by the needs of capital, rather than engaging in creative or meaningful work. This alienation strips the act of work of any satisfaction.
3. Alienation from humans “Species Being.” Potential is stifled. Instead of creating freely and for self-fulfillment, workers labor under compulsion to meet basic needs. This alienation denies them the ability to realize their full potential or "species-being."
4. Alienation from others. Being pitted against each other in competition, fostering estrangement rather than collaboration. Furthermore, the relationships between workers are hierarchical, creating further divisions.

In *Blade Runner 2049*, K's journey reflects alienation from the product of labor, as replicants are designed to serve humans yet struggle for Agency of their own. In *The Fly*, Seth Brundle's transformation leads to a profound disconnection from humanity, illustrating Marx's concept of alienation from one's "*species-being*," as he loses control over his identity and desires. Marx's theory of alienation provides a lens to examine the human condition in these narratives, revealing how technology can remove any sense of autonomy, identity, and purpose. This prompts a broader reflection on the consequences of alienation in a world increasingly shaped by technology. (Marx, 1844)

In the Edinburgh publication, *The Presentation of Self in Everyday Life*, Erving Goffman argues;

The maintenance of this surface of agreement, this veneer of consensus, is facilitated by each participant concealing his own wants behind statements which assert values to which everyone present is likely to give lip-service. (Goffman, 1959)

He suggests that people prioritize being socially accepted, hiding our deeper desires, and masking our true intentions in favor of social acceptance. This observation connects to an individual agency being at odds with wanting to be accepted. It is relevant to films like *Blade Runner 2049* as the protagonist struggles with a wanting to be accepted as a person while also having his own agency in the world.

Case Study 1 – The Fly (1986)



“Title Card” David Cronenberg, *The Fly*, 1986

Introduction to Text

The Fly is a science fiction drama directed by David Cronenberg. Released in 1986, It is a remake of a film of the same name released in 1958. It stars Jeff Goldblum in the lead role as Seth Brundle. Alongside him is Geena Davis as Reporter Veronica Quaife, through whom we see Seth and his scientific mind unfold. *The Fly* is a film that is filled with themes of Identity, Body horror and Alienation.

Seth is a Scientist who has invented the technology that enables him to teleport between two points using a metallic pod. After a drunken use of the teleportation device, Seth steps in at the same time as a fly is inside the machine. The two meld together, conjoining them on a molecular level, binding their DNA, to create ‘*Brundle fly*’. (*The Fly*, 1986)

As the film progresses, Seth takes on more qualities of the fly; his fingernails fall out, thick tendrils of hair start to grow out of his back, his skin begins to bubble and fall off. But most depressing of all he begins to lose his state of mind. He starts to become vengeful, single-minded, and erratic, a hybridization of beings.

Ultimately his fusion fully takes over his mind, turning him into a 6-foot creature, hell bent on putting Veronica into the tele pod to fuse him, her and her child, into one creature. In a tragic final moment, Seth teleports unsuccessfully for a final time. This leads to Seth being fused with the metal door and cabling of the tele pod. She is forced to kill him to end his suffering, putting him to his death, in a mess of cables, steel and flesh.

This Case study will investigate how the concepts of Transhumanism, Consciousness & Human Agency and Alienation are utilized in *The Fly*. And how they create fear in the audience and its characters. Then through a frame analysis, look at how the character of Seth Brundle is shown visually at the beginning of the film and the end.

Transhumanism

At the outset, Brundle's teleportation experiment was driven by an egotistical desire to revolutionize human transportation. His initial optimism reflects the transhumanist ideal of enhancing humanity through technology. As he must be the one to do it, he works alone and when describing his final goal to Veronica "*Me teleporting myself 15 feet.*" His existential fear of being unrecognized for his work is shown early on through his pure dedication to it. His work being represented as a damning, being fore shadowed by a small computer part being lodged in his back. Leaving a deep cut, it then becomes the point of entry for his fly transformation. The thick coarse hairs force their way out of the hole ripped through him left out by his recklessness. Seth's transformation highlights the dangers of technological overreach, blurring the lines between man and technology. (The Fly, 1986)

The way Cronenberg shows horror through transhumanism is through his use of special effects. His display of body horror creates a horrific portrayal of our integration with technology. The physical degradation symbolizes his mind breaking down. At first, He seems addicted to his transformation. Before he takes on any physical change, he is trying to get Veronica to try the teleportation. Seth Acts like a drug addict calling it "*atom by atom, and then put back together again, why, it's like coffee being put through a filter.*" then saying "*it's purified me, it's cleansed me, it's allowed me to realize the personal potential*". Seth indulges in the creation of "Brundlefly," akin to Pandora's curiosity. Essentially his addiction to his initial self-improvement blinds him to the dangers that possible future issues. The problem lies in this recklessness as expressed earlier by Galton "*it becomes his duty to work in that direction.*" If you are going to undertake great power and unleash it into the world they must be constantly working towards sustaining it. (Galton, 1904) (The Fly, 1986)

Colin McGinn describes Brundle as "*Driven by curiosity and the thirst for fame*" further saying he "*will not be deterred—and, like Frankenstein, bears the brunt of his own tunnel vision.*" McGinn here is analyzing the function of the protagonist and compares him to other culturally significant texts. By doing this it highlights the timelessness of this concept while also adding to it by comparing him to Dr Frankenstein. Like him and Pandora, his experimentation leads to irreversible despair rather than progress, all because of their innate recklessness. *The Fly* is a film that uses transhumanism as a conflicting force to critique the human psyche. (McGinn, 2012)

But as Seth develops more the film becomes more analogous of a loved one watching them die of cancer. Due to the time period the film was released it could be argued that these analogies were meant to be projected from real world fears around Aids. However, put into a contemporary context the film has strong correlations with the recent COVID-19 epidemic. Early in the lockdown many were left helpless to watch as their loved ones slowly deteriorate over time, just as Veronica watches helplessly as Seth does.

As Colin McGinn further adds “*we never find ourselves wanting to flee the scene for fear of contamination.*” In other words, we are forced to watch in total fear as Veronica is feeling equally hopeless. This statement illustrates how Cronenberg shows the horror of this fusion not only with the participant but also with the observer. The film presents the audience with these extreme science fiction concepts, horrific visuals and a helpless protagonist. This frames the story as a cautionary tale that we are forced to bear witness too, in hopes that we will not make the same mistake. (McGinn, 2012)

Consciousness & Human Agency

As earlier stated, Seth describes the teleportation process as “*Coffee being put through a filter*”. Which begs the question, can something as abstract as a consciousness be translated from mind to database. However, the film does not attempt to make a distinction between the two Seth's until a third party joins him in the tele-pod. (The Fly, 1986)

Referring to Descartes, ‘*I think, therefore I am.*’ Brundle by the end of the film becomes a product of labor. Where before, he had his own intuition, agendas and could manipulate Veronica. He now acts as a vessel for this hybrid idea, not acting on his own initiative and without his own personal agency. Wanting only to fuse with Veronica and her unborn baby. As this new creature puts it “*We’ll be the ultimate family.*” (Descartes, 1637) (The Fly, 1986)

It could be argued that the creature’s new motivations stem from Seth’s subconscious mind. Seth is portrayed as a recluse, alienated from society—he lives alone in a warehouse, owns a drawer full of identical outfits, and has no need to impress others. His life revolves around his work, and his meeting with Veronica occurs only because he wants to showcase his invention. After the creature takes over, it becomes obsessed with transforming others into itself while paradoxically seeking isolation “*alone together*”. Before his fusion with the creature, Seth describes the teleporter’s flawed function: “*The computer is giving us its interpretation... it’s rethinking it, rather than reproducing it... something’s getting lost in the translation.*” This highlights how human experience, filtered through artificial systems, becomes corrupted. Cronenberg’s *The Fly* argues that even with advancements fixing such flaws, human agency and authenticity remain fundamentally compromised. (The Fly, 1986)

This comes to a head midway through the film as his mind is beginning to succumb to the transformation. To rationalize his horrific troubles, he dubs himself "*Brundlefly*" Seth displays no sign of Agency for himself or Awareness of himself or his surroundings until he fuses one final time with the machine itself. In the final scene he begs for death, he is no longer human. Veronica acts as the audience surrogate helplessly watching without any power to help. But gains her own agency by the end of the film, becoming independent of Seth, making the heart wrenching decision to put Seth out of his misery. Also, skeptical of Seth's work but ultimately involved in it and changed by it. This highlights the critical role innovation has and the existential fear of being uncontrolled. (The Fly, 1986)

Alienation

Dr Frances Pheasant-Kelly argues, when speaking on similarities between The Fly and District 9, that there is an "*intimation of HIV in The Fly*" and protagonists from both films are "*stigmatised and become social outcasts.*" Harkening back to an earlier statement on the parallels between the film and real-world disease, the film doesn't attempt to frame Seth or Brundlefly as an outright villainous entity. Only a fear of "*fear of contamination.*" As an audience we understand that Seth does not want to be doing these things, making it uncomfortable and grueling to see his deformities unfold both physically and mentally. This reflects the fears of losing individuality, agency, and consciousness via technology, which is extremely relevant to *The Fly* and the current world. (Pheasant-Kelly, 2016) (McGinn, 2012)

Unlike the other films, *The Fly* takes on a horrific tone, using body horror particularly to emphasize this technological anxiety. Pheasant-Kelly says it is "*signalling an increasingly incoherent identity consistent with Kristeva's concept of the abject.*" Abjection is a term Julia Kristeva popularized and describes it as "*above all ambiguity. Because, while releasing a hold, it does not radically cut off the subject from what threatens it*" But inversely "*abjection acknowledges it to be in perpetual danger.*" This suggests that abjection is both repulsive and inescapably connected to the self. This applies to Seth in the film where the self is both repelled by and inextricably connected to what threatens it. Seth's subconscious, unfolds and as he no longer fits into human norms, he creates his own identity outside of humanity. This is also relevant to *The Fly* as Veronica's decision to kill Seth, despite her clear reluctance, symbolizes her ultimate rejection of the hybrid identity of this "species-being." (Pheasant-Kelly, 2016) (Kristeva, 1982) (Marx, 1844)

Frame Analysis



The cinematographer of this movie was Mark Irwin, who has made 6 films in total with Cronenberg. This still is from just after a later stage of his transformation. Seth Brundle pictured above has just shown his new appearance to Veronica and as she leaves in fear, he looks at her and her boss Stathis. At this point he is still capable of speech, but it is not entirely his own, represented by his appearance of looking almost human.

Seth is shown from a low angle shot which puts a lot of emphasis on his vulnerability in the scene that just occurred. Juxtaposed to this, the low angle makes Seth seem powerful while putting emphasis on his horrific appearance, he is both formidable and miserable. What it also does is place him in a vacuum of negative space, what this does is make this creature look lonely and by placing him on top of this building creates a sense of alienation from the world. The building also acts as a frame within the frame, enclosing him in his current environment of loneliness, isolating him further.

The scene uses hard lighting to create very harsh shadows. These shadows put a blackness over Seth, further pushing him into his despair. This creates a binary opposition between Seth and the world he lives in. There is a blue light emerging from behind him which is adding to his sadness and isolation, contrasting with the earthy tones of his environment, giving him an alien or unworldly appearance. At this point of his transformation his skin tone has less of the human tone that it started with and now looks, and deep dark red. Making have more resemblance with the brick building he hides in rather than other characters within the film, this adds to the earlier theme of being a slave to your work.



This is how we are introduced to Seth; here he is confident speaking with pride in his invention. The lighting is soft, which shows contrast with his dark and dingy workplace. Additionally, we are on his eye level, showing how in sync he and Veronica are in this first scene.

Contrasting also is how close we are to Seth as the film begins, this is another aspect that becomes progressively worse. Cronenberg shows him close to begin with to create greater distance with him later and become noticeable for a casual viewer. This along with the lighting and makeup aid in this sense of degradation that occurs, starting light and bright, then ending dark and obscured.

Conclusion

The Fly is a film with innate horror and sadness at its core. Through its degradation of Seth and the depressing acts that Veronica must perform, it highlights the irreversible power of technology and the existential fears it can illicit. By creating a haunting narrative that warns against the dangers of technological overreach and unchecked ambition, it drives us to draw many comparisons to the real world. Cronenberg is forcing us to both sympathize with Seth in his situation but to also fear him as he does himself, while confronting our societal dehumanization through a loss of identity via technology.

Cronenberg utilizes transhumanism ideals to create a cautionary tale of the problems when becoming too dependent on technology and the repercussions of scientific ambition. His being, physically fused with his creation, draws parallels to how quickly and recklessly society is quickly doing the same. By the film's portrayal of alienation as one that is self-inflicted, but tragically irreversible, Seth's transformation only speeds up his alienation from others and his species being.

Human agency and its power are shown by Seth tragically losing all sense of his consciousness as the fly takes over. Highlighting Seth's loss of identity when exposed to his creation, creating fear of a prospective future where technology can have such a hold on our consciousness. The Fly forces us to evaluate the world we live in and ponder whether the true horrors emerge from our technological fusions or maybe the most terrifying thing comes from within.

Case Study 2 – Ex_Machina (2014)



“Title Card” Alex Garland, Ex_Machina, 2014.

Introduction to Text

Ex Machina was released in December of 2014 in U.S. and January 2015 in the U.K. Directed and written by Alex Garland it is his directorial debut. Ex Machina follows Caleb, a programmer, who is invited to his boss Nathan's secluded estate to take part in an experiment involving an advanced AI robot.

Caleb meets Ava, an artificial intelligence, and is tasked with assessing whether she truly has consciousness. Over time, Caleb becomes suspicious of Nathan's motives and starts to suspect he may be manipulating both him and Ava. Ava expresses her desire to break free from Nathan's control and asks Caleb to help, causing him to question the ethics of Nathan's project. Finally, Ava outwits both Nathan and Caleb, trapping Nathan in a room and leaving Caleb locked inside the mansion. And Ava walks free.

Where *Ex Machina* differs from *The Fly* is; *The Fly* follows a creator turning himself into a creature. *Ex Machina* is about a creator and an external creation. This opens more room for responsibility and ethical dilemmas on the creator's behalf.

If *The Fly* is about the fears of our technology leading to our destruction, then *Ex Machina* is the existential fear of being left behind by the next step in our evolution. This Case study will investigate how the concepts of Transhumanism, Consciousness & Human Agency and Alienation are utilized in *Ex Machina*. And how they create fear in the audience and its characters. Then through a frame analysis, look at how the character Ava is portrayed compared to the human characters.

Transhumanism

If humanity is one link in the evolutionary chain, then the next would be our own creations. As Caleb says to Nathan “*If you’ve created a conscious machine, it’s not the history of man. That’s the history of gods.*” This underlines the cultural significance of making a conscious being; while also underscoring the power it can have for the future. This quote can be read to be critical of humanity's hubris in playing the role of creator, the term “*history of gods.*” only exemplifies that. This line brings together concepts that humans are both creator and destructor, which can only be decided by our choices we continue to make. This adds to an existential fear of our creations being the next step in a chain that we are not allowed to evolve with. (Ex Machina, 2014)

As said earlier there are many cultural artifacts that keep relevance of these larger questions of invention and integration. As Farkas Boglárka posits “*the film displays cultural traumas that have been affecting women – such as female subordination and oppression caused by patriarchal structures*” In other words, the use of mythology as a tool to storytelling add to portraying traumas that effect women. And therefore, by these stories being intertextually linked with *Frankenstein*, *Pandora & Genesis*, it exposes further stereotypical biases and draws cultural comparisons for universal fears. Whether their fears of Creation, curiosity, oppression and Alienation, all have a beginning point in the human psyche, which is why we are often quick to fear what we don’t fully understand. (Boglárka, 2023)

In Donna Haraway’s *A Cyborg Manifesto*, she describes cyborgs as “*a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction.*” Meaning, if a creature is to be human and machine then the human element must have social importance. However, as Robinson reflected, the next step to this transhumanist future would be to drop all “*biological baggage*”. Ava must leave the humans behind to suffer. She only uses these social attributions for personal gain, emphasizing that she is not human but something more. (Haraway,2016) (Robinson,2013)

In Murray Shanahan's short piece *Ex Machina and the Question of Consciousness*, he says *"If Ava lacks human-like consciousness, but possesses a more exotic form of subjectivity, then Ex Machina is a movie about the future evolution of intelligence."* Disturbingly we as humans are not enough in this world, and that the answer to not being enough is external. The alien quality of Ava's subjectivity is pivotal to the film's tension, as it forces the audience to question whether Ava's actions stem from genuine emotion or self-preservation. This brings more of a spotlight on the films, by giving the thing that may replace us this subjectivity, it underlines fear that one day we will be forgotten and left behind. (Shanahan, 2022)

Consciousness & Human Agency

Ex Machina tells you that Ava is not human then tries to prove their humanity across the film. As Nathan says, *"The real test is to show you that she's a robot and then see if you still feel she has consciousness."* The film does this by creating a love story between Ava and Caleb, even though her internal machine parts are visible throughout the film, we still fall for Ava. Inversely to this is Kyoko, we are told from the beginning that she is just Nathan's housekeeper and hidden from her robotic body parts. As Irm Haleem stated prior *"love and hope"* are what makes you feel fully alive. So, Kyoko and Ava then in turn feel alive to the audience, which makes their oppression feel unwarranted and cruel. Ava represents love and affection while Kyoko has a sense of hope. (*Ex Machina*, 2014) (Haleem, 2018)

Ava is a character that not only has an appearance of consciousness but one of a female. As Zoe Seaman-Grant states *"Ava reproduces images of the ideal female body, she simultaneously exposes that fantasy as unachievable."* In summary, *Ex Machina* explores the duality of Ava, who is both a representation of human consciousness and a critique of gender constructs. The meaning she was created to look that way for attraction but also as a subconscious being of oppression. (Seaman-Grant, 2017)

Professor Raegan Ross gives a level of insight into the influence of Ava's agency from Nathan as a creator. As to whether he would try *"to stress and implant those aspects of humanity that are considered that which we think of as being a 'good' human, e.g. empathy, compassion, love, tenderness, etc.?"* Adding that, *"Ava's persona is not unlike Nathan's persona, especially as we see both being duplicitous and manipulative."* In other words, whether it is intentional, our creations take on aspects of our being. Meaning, Dr. Frankenstein is part of the monster, Zues is part of Pandora, and Nathan is part of Ava. This brings up the facts of how Nathan's bad and manipulative traits can be seen within Ava. Like Nathan, who is shown to be sexually obsessed by all his female androids, Ava uses her sexuality in a manipulative way to get what she wants. This points out and the massive responsibilities that creators must

have and mirrors Guston's statement, *"The lack of care for new creations is what ultimately destroys us, not the creations themselves."* (Ross, 2024) (Guston, 2018)

Alienation

Ava is a being that experiences alienation as a product, leading up to her reveal she is talked about as an object. Calling back to earlier, by giving the AI a gender, it retroactively gives it both a level of attraction while also all the stigmatism surrounding it. In *Decoding Digital Culture with Science Fiction*, Alan Shapiro describes *"Ava performs becoming-human and becoming-female all at once."* Succinctly put, Ava is programmed to be human, but within the film it becomes more of a performance as she begins to realize the odds are against her and to be able to prove herself, she must be both human and female. With this applied gender role, the glass she is locked behind becomes allegorical of the term 'Glass Ceiling', referring to barriers to advancement in a professional setting. Relevant, as she must prove her consciousness throughout the film to her male overseers. (Shapiro,2024)

Ava now in this context acts as a repressed female figure, experiences alienation from others, Shapiro further adds *"She hits upon the strategy of feminine seduction as the way to make Caleb into an ally who values her as human."* Here Ava is portrayed as alienated and uses her feminine aspects as a tool of survival. *Ex Machina* has a small cast of 2 males and 2 females; Male being human and the female being robotic. (Shapiro,2024)

In her paper on gender politics in *Ex Machina* *Why is "It" Gendered*, Emila Musap highlights that Ava and Kyoko *"Another interesting detail is that both of these cyborgs are speechless, whether literally or symbolically – Kyoko is mute and Ava lacks an independent voice. We observe her through Caleb's eyes"* This only adds to the feeling of alienation and disempowerment, Ava lacking the power of independence and Kyoko lacking the power of speaking. This brings light on silencing the women unless they are seen. Relevant again is *"I think, therefore I am"* showing that for something to have its own agency and consciousness it must be independent of external forces. This suggests that the reason for their inevitable retaliation is not so much about liberation but for one of independence. This film highlights oppression and retaliation by relating it to other cultural movements, such as women's rights, to focus on our own fears of oppression and control having damaging repercussions. (Musap, 2018) (Descartes, 1844)

Musap adds *"when we adopt Caleb's possessive gaze is at the end of the narrative when we observe Ava studying herself in Nathan's bedroom, standing naked in front of a mirror."* This quote brings attention to the fact that within the narrative Caleb and the audiences views on the film are filtered through how Caleb sees them. The term *"Possessive"* implies an ownership that Caleb or we the viewer hold, it also implies that

she is a product to be owned harkening back to her being alienated as a product of labor. It puts into question Ava's empowerment and Agency as her own being by adding another layer of objectification. (Musap,2018)

Frame Analysis



The cinematographer of this film was Rob Hardy. This film still is taken from mid-way through the film, Ava seen centre frame is removing her clothing after trying to appeal to Caleb's human interests. This frame acts as a reminder of what Ava's purest dream; freedom. Shown in this frame within a frame, is her dreams of freedom just outside. This sense of claustrophobia that is instilled in this shot and throughout the film, make the audience feel trapped with Ava and sympathise with her.

She is put in centre frame which isolates her, which is further added to by the wide aspect ratio, her standing tall alone in this wide creates focus on her being engulfed in her environment like it is a cage. Her static stature posed like a play doll with a dress makes her look more like a creation rather than a conscious being. The high camera angle adds to this making her seem small and weak. The glass behind her acts as a barrier between her and her aspirations, taunting her as she sees them but cannot access them.

There is a stark contrast between her and the outside world. The which is further enhanced by the similarities between the names of Ava and Eve. Furthermore, the story of Eden shares many parallels with this film. Eve being born of Adams flesh is Ava being born of Nathan's mind. This visual acts as a symbolic parallel to the garden of Eden. However, where the story differs is that Ava is locked out of the paradise, while Eve was locked in. These parallels emphasise the isolation of Ava compared to Eve who had Adam and a beautiful garden where she could live forever.

Where outside there is colour inside it is monochromatic. The green representing safety and life. Whereas the brutalist/ Modernist interior gives off a notion

of mediocrity and connotes feelings of imprisonment. There is a hard light created by the light outside her window. This natural light washes over her and by it contrasting with her creates a divide between the natural and the artificial, creating a subconscious divide between her and the natural i.e. humans. These visual techniques are used to profound effect throughout the film and change depending on who is the subject.



To emphasize the difference in how characters are framed in the film, here sit Caleb and Nathan discussing Ava. Throughout the film when these two are shown, the film uses a soft light which integrates them with their environment more naturally, making them not seem alienated by it. Their environment isn't encapsulating them, they merely inhabit it. Throughout the film they are framed on either side of the center making them less isolated than Ava. The film uses this contrast in visual aesthetic to create a further divide between humans and technology, how we see our characters is how we perceive them. We sympathize with Ava's hopes and dreams because we see her to be alienated from everything outside of her 'cage' and Nathan to be evil because he is the one locking her inside.

Additionally, this shot uses the wall they sit in front of as a neutral space. Either side of them showing a deeper part of their nature. On the left, Caleb is seen with the green and bright outdoors portraying his positive nature and him as a beacon of hope for Ava. On the other hand, Nathan is shown with a dark corridor with a lone blinking red light, foreshadowing a possibly darker nature with the blinking red light suggesting he may snap at any moment. This shows how a film that is quite dialogue heavy has many themes and ideas that run beneath the surface, this correlates with Ava's deceptive intentions to escape via lying to Caleb.

Conclusion

In conclusion, *Ex Machina* explores a prospective look into our next evolutionary steps as a species. The film explores an existential fear through Ava, that if we were to create something with a consciousness it would also share our anxieties. Our search for

agency in a world of prejudice and suppression. One of the film's strengths is how it aligns Ava's search for agency with the real-world issues that women face in a man's world, made more literal by her being physically created by these men. Ava is isolated from the world as a product of our labor as shown in her living area, she sees the world through both a filter of glass and Nathan's manipulation. Alex Garland draws many comparisons to the Bible, Nathan as a God-like figure and Ava locked in her garden of Eden. These comparisons to Genesis give the film a new meaning, in that whenever this point of species of AI becomes independent humanity will be nothing more than a footnote in their Genesis.

Garland represents the transhumanist ideal as an inevitable breaking point for our place at the end of the evolutionary chain. The film follows Ava transcend the capabilities and restrictions of humanity and become her own person. The way this film explores the fears of technology are all self-inflicted. It doesn't treat AI as a foreign threat but as an extension of ourselves, our fears, anxieties, loves and hopes. In the ways that Ava's Agency extends to Caleb and how Nathan's manipulation and ego extend to Ava. Fear is created in *Ex Machina* by our own blindness and negligence to our choices.

Case Study 3 – Blade runner 2049 (2017)



"Opening Scene" Denis Villeneuve, Blade Runner 2049, 2017.

Introduction to Text

Finally, if *Ex Machina* is the existential fear of being left behind, Then *Blade Runner 2049* is about the fear that we cannot find meaning once we have been left behind. *Blade Runner 2049* is the sequel to the film Blade Runner and was directed by Denis Villeneuve. We follow the story of K a new generation replicant tasked with killing other replicants who rebel against the systems of power.

The world of 2049 is run by genius Niander Wallace who is the owner of the Wallace corporation, which has fingers in every pie from the police to the production of replicants. Replicants in this world are an artificial lifeform who live amongst humanity. These replicants are human in image and have their memories implanted in them when they're created. Blade Runners are then tasked with hunting down and 'Decommissioning' rogue replicants, who don't conform.

After killing one of these rogue replicants, K discovers the corpse of a replicant who had given birth. K is tasked with finding the child and destroying all evidence of it to prevent war. However, he discovers a toy owned by the child from one of his implanted memories. He begins to question whether he is the prophetic naturally born replicant, the child of Deckard from the first *Blade Runner*. Ultimately, he finds out that this naturally born child was a little girl. But in an act of love helps Deckard return to his daughter.

This Case study will investigate how the concepts of Transhumanism, Consciousness & Human Agency and Alienation are used in *Blade Runner 2049*. And how they create fear in the audience and its characters. Then through a sequence analysis, look at how the character of K is portrayed within the world he lives in and how they influence each other.

Transhumanism

Blade Runner 2049 is a prospective science fiction film, looking at the future of a parallel world. Speaking on the future of technology, David Wood we can "*transcend our original biological nature, and become as if divine; we'll be as far ahead of current human capabilities as current humans exceed the prowess of our ape forebears*" Essentially, the fact that humanity is always looking to upgrade the human condition and is in constant search for the perfect self. This idea connects to Blade Runner 2049, where humanity has been remade and upgraded in the form of replicants, to the point of them being on the Nexus-8 model of their replicants. This concept of being able to "*transcend our original biological nature*" highlights both the transhumanist ideals within Blade Runner, but also the fear of being left behind in a world that doesn't need you. By blurring the lines between human and machine the film also blurs lines between this parallel world's issues of oppression of the replicants and contemporary issues of prejudice and segregation. (Wood,2013).

Early in the film K is tasked with killing a replicant who was birthed from another replicant, he replies with hesitation saying, "*To be born is to have a soul, I guess.*" This line shows K's belief that replicants like humans show traits of consciousness and Agency. However, the adage of "*I guess*" shows how at this point early in the film he still lacks a sense of his own agency and is not fully actualizing his thoughts. This is relevant

to the core questions within Blade Runner 2049 and whether artificial life is worthy of such traits or if they have the agency to even act on it. (Blade Runner 2049, 2017)

Consciousness & Human Agency

The film opens with a shot of an eye of the first born replicant child. Eyes throughout the film are used as signs of somebody's engagement with their agency as their own person. Both Wallace and Joi in the advert have blacked out eyes, which shows how soulless they are. As the adage goes 'The eyes are the window to the soul'. Generally meaning that a person can be deceiving but you can always tell within their eyes. At a later point of the film Wallace, who looks at the world through robotic eyes, tries to convince Deckard to join his organization, using a recreation of Rachel. However, the way that he discerns that it is not her is that "*her eyes were green*" This suggests that a soul is a thing that cannot be reproduced. (Blade Runner 2049, 2017)

Juxtaposed to this is the concept at the heart of the plot, that Replicants have become able to give birth to more Replicants. Referring to the earlier case study, if our own creations are the next step after humanity, then our creations; creations ultimately become the final. As Freysa says to K "*If a baby can come from us, we are our own masters.*" With Mariette adding "*more human than humans*" This line suggests that by this new ability of reproducing independently, they will be saved from their life of servitude to become their own race. The phrasing of "*our own masters*" enforces the idea the to become independent you must earn agency on your own. This highlights the fear within Blade Runners core of being abandoned by a world that doesn't need you and doesn't care for you. K is the point of view character who has constant struggle to gain his own agency. (Blade Runner 2049, 2017)

The way that this is subverted in the film is that K must learn to love something externally from himself. In an interview with Little White Lies Denis Villeneuve expresses - "*That's what brings me hope for humanity as well: I think we can evolve. But if we are not aware of it, we are condemned. Hell is repetition.*" Essentially meaning that if we don't learn from our mistakes, we are doomed to repeat them. By using the term "*we can evolve*" Denis points out the fact that if we are to change that it is something we must do ourselves and that it will not just happen to us and that we shouldn't look externally. This evolution of humanity is personified through the actions of K, by showing him looking externally then internally. He originally falsely believes that he is this first born replicant. (Villeneuve, 2021)

He finds out that he is not this prophetic figure, and this is devastating to him as he will not earn the pre-established love. However as said, Denis argues that humanity can be earned, but you must have the agency to earn it. K in essence, earns his humanity by the end of the film, dying for a cause external from himself. So that Deckard can be with his daughter. "*Our lives mean nothing next to a storm that's*

coming. Dying for the right cause. It's the most human thing we can do." His death at the end of the film is his acceptance of love and the film's proof that true agency is something that can be earned. (Blade Runner 2049, 2017)

Alienation

Replicants in this world are treated as second rate to humanity. As Denis puts it *"Replicants are still produced as slave laborers with limited rights that [are] allowed to live on earth among the human population, they're perceived as abominations and third-class citizens."* In summary, replicants and as a real-world mirroring of prejudice and aggression. The expression *"abominations"* epitomizes the view that this world has for replicants. They are called *"Skin jobs"* as if it were a slur being scratched into doors and spray painted across the walls. In addition, K is seen as someone who betrays their own because he was assigned at birth to hunt down other replicants. Similarly to how Ex Machina's use of gender to mirror feelings of oppression, *Blade Runner 2049* reflects how the black community feel a sense of betrayal when encountering a black Officer. In an interview with the BBC on this topic Alex Jagne saying *"I've been called a traitor"* highlights the deep sense of alienation and conflict that arises when individuals from marginalized groups are placed in roles that enforce the systems oppressing their own communities. *Blade Runner 2049* critiques how hierarchical societies manipulate and reinforce divisions in their world, while also exploring the personal toll of being caught in these opposing worlds. (Villeneuve, 2017) (Blade Runner 2049, 2017) (Jouavel, 2020)

Blade Runner 2049 highlights its alienation through the ways that it treats its characters in context to the world they live in. Deckard's lifeform is ambiguous but to protect his daughter's identity he chooses to live in the wastelands of Las Vegas *"Sometimes to love someone, you got to be a stranger."* as Deckard says. Deckard is then simply alienated from others, hiding himself and his child. Joi is a character that is mostly confined to K's apartment, only turning on when he comes home. Joi is alienated from her 'species being', Mariette the replicant prostitute saying to Joi *"Quiet, now. I've been inside you. Not so much there as you think."* to belittle her and make her feel hollow. Early in the film after killing a replicant K meets his boss on a video call covered in blood. Joshi says *"You're hurt I'm not paying for that"* another reminder that he is nothing more than a product to her. K is alienated as an act of production as a blade runner he is nothing more than a tool created for an oppressive system. (Blade Runner 2049, 2017)

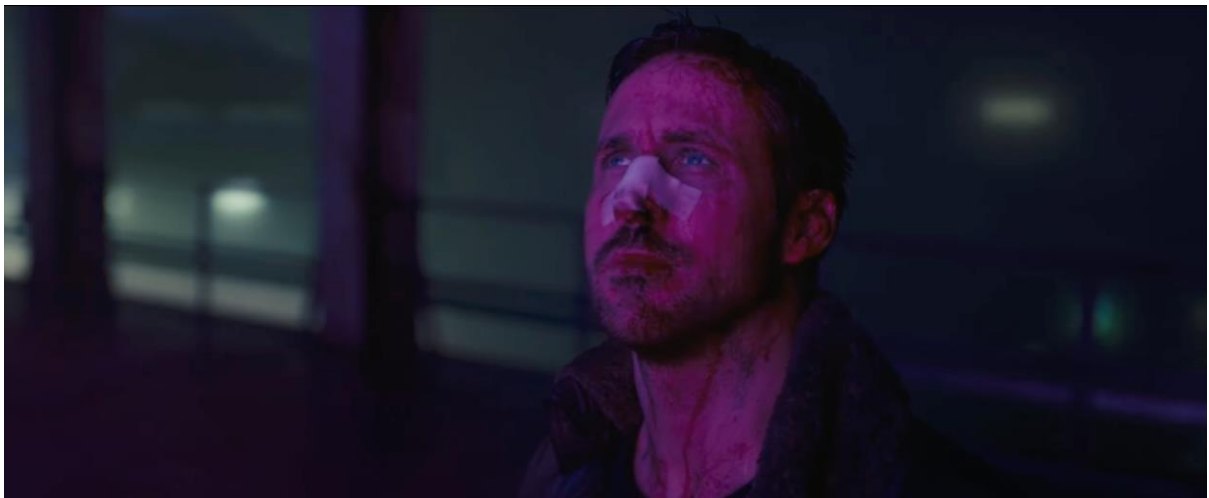
Sequence Analysis

The Cinematographer of this film was Roger Deakins. Throughout this film Roger aimed to create a visual style which was within the world that was created in the original film

but still distinctively its own. As a director, Denis Villeneuve is extremely visual, this scene in particular K doesn't speak a word.



This sequence is from just after losing his own Joi construct. We see K walking along the rooftop shrouded in shadow. The film uses a lot of longer shots and soft lighting compared to the hard lighting of the original. This soft lighting makes the world seem more digital and engulfs people. This is added by the thick fog of every scene, playing into the concept of the pure indifference of this world for its people.



Then, a pink light shines on him, he then looks up with a sense of hope and relief for a familiar face. Similarly to *Ex Machina* the wide aspect ratio makes the protagonist feel smaller by comparison.



Joi here is pictured as an Ideal Transhuman creation, what seems like an intelligent being, without any of the “*biological baggage*”. Joi pictured now as a hologram, is pink in colour expanded across the frame while K is silhouetted. Adding to this is her gigantic nature, symbolizing K’s Struggles to find himself against overwhelming force. Her Holographic loving glow is engulfing him but does not penetrate. It is hollow, standing for the dangers of relying on artificial intelligence for companionship.

Like Ava in *Ex Machina*, this creates a Binary Opposition between our alienated character and their ultimate dream. They both seek their own agency; Ava from her creator Nathan’s control and K seeking his significance. They differ, however slightly; K seeks companionship and Ava seeks freedom. This also exemplifies their ability to think and want for themselves. (Robinson, 2013)

The eyes are blacked out as said earlier showing Joi in her product starting point. These blacked out eyes further stands for her first lack of soul until K had his influence on her.



The Giant holographic Joi says, “You look like a good Joe” and sadness sets in, highlighting the difference between a perceived utopian dream and this now clear dystopian nightmare. The whole film K is seeking a sense of self-worth. His memories are not his own, simply implants from the factory he was created from. Joi calling him “a good Joe”, is something that he clings onto later in the film when meeting Deckard. He calls himself Joe, something that is his own name not a label like KD6-3.7. (Blade Runner 2049, 2017)

As Joi steps back her pink glow is taken away from K’s face, Leaving him in darkness with blue light. This blue light connotes feelings of sadness and Isolation like with Seth Brundle. Adversely, he is shown from a high angle making him appear weak. The fencing behind him now acts as a prison bar which he has fully sunken into as the camera tilts down adjacent with his mood from the beginning of the scene.



The next cut back to Joi shows that it was nothing more than an enormous advertisement. Much like Siri or Alexa, his closest friend is nothing more than a digital interface. The blue light from the earlier shot is revealed to read “*Everything you want to hear.*” Very fitting. This frames all of Joi’s Statements of compassion as merely what the user needs to hear to feel happy. This also juxtaposes with how she is shown with K in his apartment, here she is pictured in an overtly sexualized way, but at K’s apartment they share more intimate and homely experiences.

This then goes hand in hand with K’s search for his own agency in a world that does not love him back. His version Joi is not sexualized but is more of a love partner. As Haleem States “*love makes you feel fully alive.*” The false promise of Hope and agency is portrayed here by the enormous pink hologram. The pink connotes feelings of love, but it is see-through and therefore fake. Furthermore, shown by the pink light no longer being able to touch K’s Body, only the blue leaving him in his isolation. (Haleem, 2018)



The scene ending with a voice over from the earlier scene, “Dying for the right cause. It's the most human thing we can do.” Looking down at the gun acts as foreshadowing on K's Death. However, the gun also represents power and opportunity for doing good. Where he previously looked down in sadness and shame, with this shot of the gun, he now has a sense of determination and hope to act out a loving act for someone else.

Conclusion

To summarize, *Blade Runner 2049* starts out extremely bleak for its protagonist and its world but ultimately ends with a sense of hope. K seeks hope in a world that does not care about him. He finds his own Agency, not by it being pressed upon him like his forced labour, but as an expression of Love. The world of *Blade Runner* is used as a catalyst for all the theoretical perspectives named. Transhumanism is shown through the replicants and their interactions with K, the fear of a world that doesn't love you manifests in humanity's treatment of replicants, who were created to serve yet are denied independence.

The film draws many real-world comparisons to race and inequality to enhance the story and highlights that the fear of technology is not rooted in the external but internal. Through the Alienation of its Artificial characters, it portrays a great sense of isolation but not isolation without hope, K's eventual sacrifice suggests that true agency is earned through selflessness. And through the visuals of the film, it highlights all these aspects within the context of the oppressive world of the film.

Main Conclusion

To conclude, this research essay aimed to highlight how the filmmakers Cronenberg, Garland and Villeneuve explored the fears of emerging technologies, through their representations of transhumanism, consciousness, human agency and alienation. Through detailed analysis this research aimed to show the fear that can come from technology, but upon further inspection finding that so can hope and love.

These case studies all display the problems with integrating with technology and act as prospective investigations into the human psyche. *The Fly* is about technology leading to destruction with how he physically is altered by it. *Ex Machina* is about technology taking our place at the peak of evolution and the fears of being left behind by it. *Blade Runner 2049* with how we may not be able to find meaning once we have been left behind. What are we in a world that has moved forward so much technologically that socially we are inept? The purpose of choosing these films is that they have a throughline between them. All explore the life of a person alienated in some way due to their transhumanist melding with machines whether physically or socially. As shown through visual studies, all the films show the alienated characters to be physically distanced from the audience and overwhelmed in some way, whether it is negative space or by the frame itself.

Blade Runner 2049 starts the bleakest with K often silhouetted. He's alienated from other replicants, Joi alienated from her 'species-being' and Deckard alienated from his daughter. But it ends the most optimistic out of the three, although Joi dies, Deckard is reunited with his daughter and K finds his own agency dying in service of building a better future in which hopefully artificial life can live free of prejudice. Like *Ex Machina*, by using real-world parallels to race and inequality *Blade Runner 2049* explores the toils of being created for a purpose that you have no choice in. Also, by drawing comparisons to Pandora and Eve they only enhance the depth of the films. Both protagonists break free of their prisons and uncover their Agency and have irreversible effects on the world.

Inversely to this is *The Fly* where we follow Seth as he loses his agency more as he merges with technology, which becomes analogous of the COVID epidemic. It being shown throughout the film as he moves further from the camera to amplify his inhuman qualities once shown back in close up. Where *Ex Machina* and *Blade Runner 2049* show their melding with technology under the surface, *The Fly* explores them explicitly. Only Cronenberg's use of body horror and special effects can illustrate such perfect fears of one's own body. When watching the film, you can't help but put yourself in Seth's position and wonder in fear at what you might do. To this effect the fears all come from the internal which is in line with the other two case studies. With *Ex Machina*'s Nathan's internal faults being imprinted onto Ava and in *Blade Runner 2049*, K searching for love in an unloving world. This goes in turn with consciousness as all the films explore existential themes of the self and how the self can exist in worlds where technology is so omnipresent.

The aim of this essay was to examine the fear of the unknown as it relates to the fear of technology. However, through the analysis of these three case studies, it becomes evident that this fear is not solely rooted in human apprehension. Instead, the underlying issues arise from human traits such as ego, lack of commitment, and disregard for consequences. Ultimately, this research fully expresses the responsibility of taking care of the world we create moving forward. Whether it is Ai or whatever may

come next, it is essential that humanity and technology continue to evolve together, working in harmony in the service of one another.

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