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Tammany Grant April 10, 2018

Predicting the Future of Humanity Through Francophone Science Fiction Film

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Abstract

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The purpose of this thesis is to use Francophone science fiction film to study how technology has been represented through cinematic history and then predict how it will be represented in the future. I argue that Francophone society portrayed in science fiction film predicts a future where technology and humans will have become less distinguishable from one another and where technology will be nearly omnipotent. Moreover, based on the evolution of the image of the woman in cinema, we believe that those same futuristic worlds, imagined so far exclusively by men, will still reflect the biases of today.

This work is divided into three chapters, regarding respectively the intersection of technology and humanity, divine technology, and the role of the technological woman. The first chapter explores how subjective experiences and memory differentiate between technology and humanity. We then analyze the human mind's capability to be a vessel for technology both inside the narrative of film and in a meta sense that pertains specifically to cinema. The second chapter studies the relationship between technology and divinity. While early film often related technology to biblical characters, more modern film shows technology as omnipotent and omnipresent (two divine attributes). As humanity and technology converge, the concept of a divine posthuman technological figure emerges.

Finally, the last chapter examines the role of the woman in a technological future and how the genre of science fiction and the medium of cinema influence that role. Though science fiction film has allowed for infinite futures to be imagined, the biases of women's traditional roles have remained the same. The power of the female lead in Francophone science fiction film is continually subverted by the prejudices of today. While we find society believes that humanity and technology will coalesce and obtain the same capabilities as a divine being, the biases of the present will persist.

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Introduction

Humankind has always wondered what the future will hold. Throughout history, our imagined futures have been contingent upon the technology that humanity possesses. Technology has always dominated culture. With the invention of the tool, the first spark of fire, or the first weapon, humanity's ways of living have been transformed. *2001: A Space Odyssey* by Stanley Kubrick captured this relationship between tool, weapon, and technology using his famous match cut between a bone and a spaceship. This film is the perfect example of the science fiction genre: produced in 1968, it had visionary images of the future of technology and the role it would play in society. Science fiction is a special genre because it allows humanity to peek into the past and see what society back then thought the future would be like now. It permits us to envision a plethora of futures in the image of our greatest hopes and fears. Cinema, because of its unique relationship with image, permits the universe that we imagine to exist before our eyes. Science fiction film, therefore, is a nonpareil way that one possibility of the future can be accessed from the present. This combination of genre and medium led me to question how science fiction film today represents technology and how it imagines the technology of tomorrow. One wonders about the societies that filmmakers can imagine and the role of humanity in these technology-filled futures. Because women's roles in film are often weak and stereotyped, we wonder specifically whether women's portrayals in science fiction film will change along with the vividly unconventional and diverse imagined future worlds around them. Even though American science fiction is the most developed, Francophone science fiction is particularly interesting because it includes a meta discourse on cinema: the beginning of

cinema is French, the beginning of science fiction film is French, and it has well-marked periods. The three periods which we focus on are the beginning of cinema, counterculture, and finally globalization. During the latter period, Francophone director Villeneuve took one of the most important science fiction films of all time, *Blade Runner* (1982) by Ridley Scott, and expanded on it. Though Francophone science fiction movies are often not as well-known as their American counterparts, they fit to the culture and the period in which they are produced. Even now, when Hollywood and therefore the U.S. leads science fiction, Francophone science fiction remains typical of its corresponding country's cultural movements. They are not only a window to a possible future, but the meta-discourse on films allows for a discussion about cinema's relationship with society and the possibilities of cinema to show the future through which we can explore our interests in the evolution of the vision of the world. In this work, we will ponder what the role of the human will be in it, particularly the role of the woman, at the intersection of technology and humanity. By analyzing Francophone science fiction film and looking at the historical trends of technology's portrayal on screen, we will see that Francophone society portrayed in science fiction film predicts a future where technology and humans will have become less distinguishable from one another and where technology will be nearly omnipotent. Moreover, based on the evolution of the image of the woman in cinema, we believe that those same futuristic worlds, imagined so far exclusively by men[1], will still reflect the biases of today.

[1] In film, male directors make up more than the majority of directors. In France in 2012-2013, only about 1 in 5 directors were female (21%). In Hollywood between 2007 and 2017, of the top-grossing 1,100 films, only 4.3% of directors were women. More recently, in 2017, "Women accounted for 11% of directors working on the top 250 films in 2017, up 4 percentage points from 7% in 2016 and even with the percentage achieved in 2000.

Though there is a plenitude of research on science fiction, there is a scarcity of research on Francophone science fiction as well as the more specific representation of women in Francophone science fiction.[2] To see trends developing throughout different periods in society for each subject, we need to look at science fiction film chronologically as well as by subject matter. I will be studying three periods, starting with the beginning of science fiction film to provide the foundation off of which we will examine the trends in science fiction film. Next, I will study a second period, that of the 1960s where France's youth started to revolt against social norms. Finally, I will investigate the period in which computers became widespread in the 1980s until today, as it symbolizes a revolutionary shift in the prevalence of the computer and modern technology in general that would go on to globalize the world. This globalization enabled, through communication and the massive amounts of data exchange, culture to be shared around the world.

The first science fiction film was *Le Voyage dans la Lune* (A Trip to the Moon) by Georges Méliès in 1902. In this film, technology exists in the form of a rocket ship made purely out of metal. After being pushed into a cylinder-like cannon, a small string is lit with fire and the rocket ship is shot to the moon. Though the technology was represented

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"WHERE ARE THE WOMEN DIRECTORS ? : Report on gender equality for directors in the European film industry (2006-2013)". European Women's Audiovisual Network. P.p. 22. www.ewawomen.com/uploads/files/MERGED_Press-2016.pdf.

[2] For women in cinema in general, the main research works that were used are: *Feminist Film Theory* by Sue Thornham, "Visual Pleasure and Narrative Cinema" by Laura Mulvey, and *And the Mirror Cracked: Feminist Cinema and Film Theory* by Anneke Smelik. Most of the research for science fiction film was pulled from diverse sources that spoke specifically of a film or author, but larger works such as *Camera Historica* by Antoine de Baecque or *L'entre-images* by Raymond Bellour were used, and the following works focus specifically on science fiction and were particularly helpful in my research: *The Philosophy of Science Fiction Film* by Steven Sanders, *La Science-fiction* by Gilbert Millet and Denis Labbé, and *Ces Français qui ont écrit demain : Utopie, anticipation et science-fiction au XX^{e} siècle* by Natacha Vas-Deyres et al.

simplistically, the vision of future technology was near to what technology would actually become. Within the same century, humankind indeed went to the moon. This is the original example of science fiction film giving us a window into past societies' predictions of the future. After a decline in French cinema in the 1910s, the 1920s, the period known as *les Années folles* (the Roaring Twenties), brought new life to the domain in France. At the time, there was little money in France and two cinematic movements were formed: poetic realism and the avant-garde French Impressionism, the latter of which concerns how feelings and impressions are manifested in film. One of the famous films of this period is *La souriante Madame Beudet* (1922), by Germaine Dulac, which is a silent film about a woman who dreams to be free of her husband. Despite having special effects in this film and a history of science fiction with George Méliès and Jules Verne, France did not continue in the direction of special effects. Instead, French directors transitioned into Impressionism and poetic realism. Germany however had more money during this time period than France and was at a cinematic apogee with the movement of Expressionism, which used symbolism and dark imagery more than realism. During this epoch, Germany was able to create *Metropolis.*

In 1927, *Metropolis*, directed by Fritz Lang, was released. Showing giant machines, a dystopian future, and a humanlike robot, Lang's film was innovative and insightful for its day and age. Although Méliès' *Le Voyage dans la Lune* marked the beginning of science fiction film, Lang's *Metropolis* is the mother of all science fiction film. Throughout the 20th century, film after film pays homage to *Metropolis:*

> The artificial, gloved black hand of the mad scientist Dr. Rotwang (Rudolf Klein-Rogge) becomes Dr. Strangelove's (Peter Sellers) artificial gloved black hand in *Dr. Strangelove* and then Luke Skywalker's (Mark Hamill) in *Star Wars* (and Anakin Skywalker's [Hayden Christensen] in the second and third episodes). C-3PO is an

almost exact copy of the Machine Woman of *Metropolis*. Similarly, Lang's Machine City and underground revolutionary workers become the Machine City and revolutionary workers of *The Matrix* and the machine world of *Dark City* (Alex Proyas, 1998). And the man in the high tower corporation and the Machine Woman, the "false Maria" of *Metropolis*, become Tyrell of the eponymous corporation and the replicants of *Blade Runner.*[3]

Images of *Metropolis* are replicated in film all the way through the present day. Its influence on other films is indicative of the way that film influences society. Popular films customarily have well-known scenes or images that society connects to particular concepts, shaping imagery and therefore notions of those concepts. For example, the dystopian city of Metropolis is referenced in *Blade Runner* (1982) by Ridley Scott. Both the architecture of the city as well as the cinematography of *Blade Runner* mimic *Metropolis.* This mimicry shows that the images of *Metropolis*' dystopia are ingrained in society's collective perception. Unlike Méliès's *Le voyage dans la Lune* which presents a positive future of science*,* Lang's *Metropolis* is the first dystopian science fiction film. He represents technology negatively, showing an entire underground city of enslaved people who live and work for the technology (the Heart Machine). The film anticipates World War II with its revolutionary technology and the industrial deaths of millions that accompanied it.

The next period we will study is the late 1950s and the 1960s. In France, this was the time of *La Nouvelle Vague* (New Wave cinema). The movement was influenced by the end of World War II and the return of traditional cinema, known as *La Tradition de la Qualité*

[3] Sanders, Steven M., and Jerold J Abrams. "The Dialectic of Enlightenment in *Metropolis*." *The Philosophy of Science Fiction Film*, University Press of Kentucky, 2008. Pp. 153-154

(Quality Tradition), which stemmed from French directors trying to compete with Hollywood. The French New Wave cinema movement revolted against traditional cinema which often cast established actors and typically used scripted literary cinema written by "scénaristes" as opposed to directors. New Wave directors were intrigued by the prospect of capturing current social issues using experimentation with cinematographic style; they also wanted to be the authors of the scenarios they filmed. About this *cinema d'auteur* (Author's Cinema), Alan Woolfolk writes: "From the notion that directors are auteurs conceiving and creating personal films to the praise of low-budget films made outside the system, the French new wave movement defined itself in opposition to the established big-budget spectacles of the French film industry."[4] This time is important not only because it was a cornerstone in French cinema, but also because it was based on opposition to tradition. It was a time in which filmmakers could, and did, represent their visions without trying to fit them into the conventions of classic French cinema. The core films of New Wave cinema were made between 1959 and 1962. New Wave Cinema preceded the civil unrest and riots of 1968 by a few years. *Alphaville* (1965) by Jean-Luc Godard and *La Jetée* (1963) by Chris Marker are the films we will explore from this time period.

The Contemporary Period of French cinema began as early as the 1980s. *Le Cinquième Élément* (1997) by Luc Besson, *Lucy* (2014) by Luc Besson, and *Blade Runner 2049* (2017) by Denis Villeneuve were released during the Contemporary Period. In France, the 1980s brought about the movement of the *Cinéma du look* (Look cinema), to which Luc Besson (director of *Le Cinquième Élément* and *Lucy*) belongs. [5] The *cinéma du look* was

[4] Sanders, Steven M., and Alan Woolfolk. "Disenchantment and Rebellion in *Alphaville*." *The Philosophy of Science Fiction Film*, University Press of Kentucky, 2008. Pp. 196

[5] Berra, John "Book Reviews: The Films of Luc Besson: Master of Spectacle". Scope (14). June 2009.

"characterized not by any collective ideology but rather by a technical mastery of the medium, a cinephile tendency to cite from other films, and a spectacular visual style (le look)."[6] In America, the entire Contemporary Period of modern cinema is composed of a massive profit-turning industry that uses large amounts of advertising and start-power to attract large audiences so as to (hopefully) offset the cost of production. As the technology industry continues to boom, animation, 3D, and other film technology has improved all over the world, but especially in America where Hollywood and the tech scene come together.

During each of these periods, the technology that appears within each film depends on society's current view of what technology is. Technology can be loosely defined as practical application of knowledge, or the application of knowledge for practice purposes. Although an exact list of what falls into the category of technology is impossible to give, we know that technology in the far past history would be the first tools, such as stone tools, clothing, shelter, eventually metal tools, wheels, and the like. The technological age of cinema dates back to the late nineteenth century and is characterized by the invention of machines such as the automobile. After World War II, advances in science gave rise to technology capable of producing even more intricate machinery: machines such as the jet engine or helicopter and eventually the first nuclear bomb (divorcing machinery from its once near-synonymous relationship with technology). In the late 50s and 60s, technology triggered thoughts of rockets and traveling to the moon as the space race was at the forefront of the technological developments. In 1969, with the first landing of humans on the moon, the once futuristic images first seen in *Le Voyage dans la Lune* became reality and the first dreams of technology in the first science fiction film had progressed into actuality.

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[6] Austin, Guy. *Contemporary French Cinema*. Manchester University Press, 1996. Pp. 119

As computers finally came about, they became the new cornerstone for technology. Becoming widespread, computers made our definition of technology more scientific, making the modern definition of the word bring to mind things like holograms and virtual reality.

In recent years, technology has transitioned to appear more and more humanlike. Confronted with inventions such as robots and artificial intelligences that talk like humans, as well as other such marvels, our current definition of technology must evolve. We must first understand the boundaries of technology to build a base on which we can see where technology is headed. Can humans be considered as technology? A brain is capable of computation and applies practical knowledge daily to sort out diverse tasks. Is a brain technology? The first chapter is going to deal with these questions, specifically where human and technology intersect. To begin, I will differentiate between humans and technologies that assume a human form by exploring what makes an individual human using *Blade Runner 2049*'s replicants and *Alphaville*'s government and citizens. Next, I explore time travel, which, in films such as *La Jetée* and *Lucy*, does not involve any external vehicle for travel, but takes place in the vessel of the human brain. We therefore consider what technology means and what the separation between human and technology consists of. The second chapter examines the phenomenon of the divine computer, in which the computer is represented with all-powerful or godlike capabilities. Through *Metropolis*, *Alphaville, Le Cinquième Élément,* and *Lucy,* this chapter looks at how humans and technology become intertwined, represented with divine elements, and what this means for the future of humankind and for the future of technology. We will also differentiate between what divinity looked like in early film in comparison to what divinity is understood to be in modern film. In the third chapter, we will look at our findings through the lens of the technology represented as woman. After studying dozens of science fiction films, it was

impossible not to see the prevalence of sexist portrayals of the women in them. While the majority of women's portrayals were the traditional and exhausted "woman as a love interest" or similar clichés, those of woman technology provide a window through which we can study how technology will be gendered in the future. I will be examining the life course of woman technologies in chronological order: from her coming into being, to her usefulness during the rising action, and finally finishing with her conclusion at the climax of the film. While the futuristic world changes and while the technology rapidly advances, will technology being represented as women escape the binds that constrain us? Science fiction is the genre that has the potential for filmmakers to break the conventions of the woman character and reconceive them, shaping the future of the woman figure with their imaginations. Science fiction is about imagining the unimaginable and materializing that imagined world onto the screen in a way that envisages tomorrow and leads us there.

Chapter 1: The Human as a Vessel for Technology

The earliest of science-fiction film, *Le voyage dans la Lune* (1902) by Georges Méliès, portrays technology as a rocket being shot out of a cannon to the moon. The technology in this film was represented as purely mechanical, with a rocket ship that would be more aptly called a capsule. It is shown being hammered away at before it is ceremoniously launched toward a hole in the clouds showing the moon. The capsule, after being stuffed into a cannon, is simply lit with a match, and with a poof! of smoke, the team is on their way to the moon. This entirely metal capsule was considered the highest of technological innovations and would continue to be so for the first few decades of science fiction film. The approach of representing technology through a vessel of machinery was common as we can see with the Heart Machine in *Metropolis* (1927). The Heart Machine is a hand-operated machine that works like a generator, powering a city. As technology in the early 1900s was not sophisticated in comparison to technology now, machines such as those seen in *Metropolis* were considered as technologically advanced. As the decades passed, technology began to take a new form: human. Films such as *La Jetée* (1963), *Blade Runner* (1982) by Ridley Scott and its sequel *Blade Runner 2049* (2017), and *Lucy* (2014), represent technology in human form. Whereas in the older films, it was easy to see what was human and what was technology, the more recent generation of films have blurred the lines between the two. In the earlier films, technology (portrayed as machines) didn't possess the capacity to think and there were stark differences between human and technology. Now that technology makes intelligent choices, the difference between technology and human is disappearing. The objective of this chapter is to determine what society believes that the role of the human will be in the future by investigating these more recent films to try to

discern what differentiates a human from technology represented in human form as well as what happens when technology is represented as human.

Differentiating between technology in human form and humans

Synthetic humans, such as the replicants in the movie *Blade Runner* and *Blade Runner 2049*, obscure the once clear divide between human and technology. *Blade Runner 2049* is set in the future year of 2049 and K[7] (Ryan Gosling), both a replicant and the protagonist, is a blade runner for the LAPD. His job is to find rogue replicants and "retire" (kill) them. Replicants are bioengineered humans who work as slaves for the rest of society. One day, after killing a rogue replicant, he finds proof that replicants can reproduce, which until then was thought to be impossible. When K reports this to his boss, Lieutenant Joshi (Robin Wright), she fears that the information could start a war and orders K to kill the replicant child in hopes that the war can be prevented. The fact that the replicant child's existence could start a war is important because it indicates that reproduction would give replicants more of a claim to humanness – and therefore more rights – than they would have without the capacity to reproduce. To Joshi therefore, biology is the mark by which humanity is measured. To the viewer, the immediate conclusion that is understood is that biology dictates humanity. However, the film reveals a more complex understanding of human and what classifies a being as human, beyond biology. As technology advances, the

[7] *Blade Runner 2049*'s protagonist's name, K, is reminiscent of Franz Kafka's *The Trial* (1925), where the main character, a chief cashier of a bank, is named Josef K. *Blade Runner 2049*'s K is renamed partway throughout the film by his holographic girlfriend and given the name Joe, as in Josef from *The Trial*, establishing a clear association between the two characters.

difference in biology between human and technology, such as reproduction, may become negligible and therefore humanity will have to be judged by a different metric.

The deeper understanding of classification between human and technology rests in the hands of subjective experiences and memory. Replicants have synthetic memories: memories are created by a memory designer and placed in their minds during creation. Since the memories that a replicant has were never experienced by them, in some sense, one could say they never really took place. The memory designer who made K's memories, Dr. Ana Stelline (Carla Juri), works at Stelline Laboratories and is subcontracted by the Wallace Corporation. Though the specifics of how the memories are made are not provided, it is shown that Dr. Stelline uses a device that looks similar to a camera lens and creates memories by manipulating holograms. From the fact that Dr. Stelline says that she loves making birthday parties and is shown flipping through colors for a cake and then writing a birthday message on the top, it seems that the designer has a particular style and that the memories are created to be original. Stelline explains, "It's illegal to use real memories. But there's a bit of every artist in their work." The holograms are eventually turned into memories and then given to the Wallace Corporation to use as replicant memories that get put into the replicant's mind during their creation. So, the memories they have of their childhoods, such as throwing a baseball with a parent, refer to events – either real or fictional – that were never experienced by them because the replicants were never kids and never had the experience of throwing a baseball with a parent. They are 'born' as adults and given memories to provide an emotional cushion that makes them seem more humanlike. Dr. Stelline alludes to this emotional cushion when K asks her how to tell the difference between a fake memory and one that "really happened". She responds, "Untangling memory and history. They all think it's about more detail, dutiful exactitude, hyperbolic

photorealism – that's not how the memory works. We recall with our feelings…and our feelings are awful students. The mind is an impressionist." Dr. Stelline and K then explore some of his memories and talk about which ones are real and fake. The fake memories sometimes were implanted to serve a specific purpose, such as teaching him a lesson like "keep away from the water". Other memories were provided to give K more human responses to situations that arise in his everyday life and therefore to make him seem more human, which is one of the goals of the Wallace Corporation.

K, while searching an orphanage for the replicant child, recognizes his surroundings and subsequently goes to find a toy horse that he remembers hiding in the orphanage. Having found evidence of a memory in a real life, and knowing that replicants' memories are not real, he becomes sure that he is himself the replicant child, the child he is ordered to kill. During the last scene of the movie, it is revealed that Dr. Stelline, the woman in charge of making the memories, is the replicant child herself and that she had based replicants' memories on her own real memories. Her memories are real, meaning that the events in her memories were subjective experiences that did happen to her. Her memories were not implanted in her mind like those of replicants. Instead, they were experienced by her as she grew up. The implication of this revelation is that the replicant child (now an adult) is human, seeing as she has real memories. Many questions arise out of this ending, such as whether memories, reproduction or something else entirely makes replicants human and not technology.

At first, *Blade Runner 2049* seems to argue that reproduction is the basis of humanness since the plot of the movie is based on the fact that finding out about replicants' reproductive capabilities could start a war between the replicants and the humans. As the replicants are subordinate to the humans, the possibility that replicants could have what

was previously thought to be a human trait could give the replicants a claim to more rights, and therefore could bring about a revolt by the replicants against their creators/masters (the humans). Yet, the subtle usage of memory throughout the film to hint humanness suggests that Villeneuve believes it is not reproduction that implies humanness but subjectivity. At the same time, he doesn't imply that memory means humanness, nor that memory means subjectivity, or even that having subjective experience based off of implanted memories implies humanity. Instead, the implication is that subjectively created memory implies humanity. This is important because it distinguishes between replicants (who have memories but are not human nor have subjectively created memories) and humans (including the replicant child). Indeed, both humans and replicants have memories; it's the fact that only one of these memories are created from subjective experience by the person who holds those memories that makes the subject human. The other memories, those that are planted in the replicant's head, imply that the being is technological, since the being did not create those memories from subjective experiences.

This conclusion, however, has a catch. K, after finding the toy, believes that he is the replicant child. If K believes that his memory is real subjective experience and not created and placed in his head, then to him, he is human and not technology. This raises the question of whose point of view decides what beings are human or not. If the viewer identifies with K, then they may believe that he is human even though he is not portrayed that way by the narrative. If they follow the given narrative and accept the decision on K's humanity that the film gives, they will finish the film believing that he is not human. The viewer may find themselves empathetic with the plight of K or other replicant beings than in human characters such as Niander Wallace or Lieutenant Joshi. The humans in the film are not always represented with the characteristics that we find most human, and certain

replicants are portrayed as more human than replicant. In addition, the technological structure of filmic identification allows the viewer to relate to onscreen figures that are not human, confusing even more the division between human and replicant. The subtleness of the distinction between human and replicant in the film allow the viewer to draw their own conclusion, which I find to be a high point in the film. *Blade Runner 2049,* following in the tracks of the original *Blade Runner*, ends with several open questions therefore leaving the film to be interpreted by the viewer. Instead of detracting from the film, I find the representation of the replicants to seem just as real as anybody else enhances the suspense of the viewer. Though the suspense does not end when the film does, the film is not missing or lacking any clues. They are there to be interpreted however the viewer wishes. Brian Tallerico in his first review of *Blade Runner 2049* comes to a similar conclusion, writing that "[*Blade Runner* and *Blade Runner 2049*] ask timeless questions and, like all great films, refuse to give you all the answer, allowing viewers to debate and discuss their meaning instead of merely being passive recipients of mindless entertainment."[8]

Blade Runner 2049 portrays the replicants to be as diverse in their expressions and ways of life as any of the human characters in the movie. In *Alphaville*, directed by Jean-Luc Godard, though the people of this futuristic and technologically advanced city are human, they wander around town with no emotion, empathy, or expressions on their faces, making them look more like machines than the replicants in *Blade Runner 2049*. The humans in *Alphaville* (other than those from the Outlands) look unthinking and machinelike because

8 Tallerico, Brian. "Blade Runner 2049 Movie Review." *RogerEbert.com*, 6 Oct. 2017, www.rogerebert.com/reviews/blade-runner-2049-2017.

Alpha 60 has taken all emotion out of the city whereas in *Blade Runner*, the viewer is supposed to wonder if the replicants are human or not.

Alphaville follows the protagonist, Lemmy Caution (Eddie Constantine), a secret agent who enters Alphaville with three missions. First, he is looking for Henri Dickson (Akim Tamiroff), a missing agent. Second, he is to either capture or kill the creator of Alphaville, Professor von Braun (Howard Vernon). Third, he must destroy the town and its ruling computer, called Alpha 60. The computer has ruled against any and all free thought and any emotion. Anyone who shows emotion, such as laughing or crying, is executed or encouraged by other citizens to commit suicide (all empathy has been extinguished), because Alpha 60 finds that emotion is illogical. Any words that may elicit emotion are also banned; dictionaries of allowed words are kept up to date and in every hotel room in the city. Caution completes his first mission quickly, finding the missing agent Dickson. While moving forward to the rest of his mission, Caution finds Natacha von Braun (Anna Karina), the daughter of the Professor (Howard Vernon) and falls in love with her. Caution's love for Natacha disturbs the city, as his love is strong and emotional. Caution talks to the Professor, who offers him the chance to join Alphaville. Caution counters the Professor with an offer to have him leave Alphaville and return to the land outside, from whence he came, but the Professor declines Caution's offer and Caution proceeds to shoot him. Caution continues to his last portion of the mission by telling Alpha 60 a riddle in the form of poetry which must be answered by one who understands the concept of an individual self. The riddle that Caution tells Alpha 60 is as follows:

> Something that never changes with the night or the day, as long as the past represents the future, towards which it will advance in a straight line, but which, at the end, has closed in on itself into a circle.

The answer to this riddle is “A human”, and since Alpha 60 cannot understand humanity, it annihilates itself. Things such as poetry and art are subjective experiences that take the reader, writer, or viewer to a higher level of consciousness where the work makes the observer question oneself and find meaning in a subjective space between one’s own emotions and the work itself. The supercomputer, Alpha 60, can’t process this riddle, as it has no subjective understanding of the work, and therefore never can fully understand the poetry itself nor the answer, humanity, as it should.

Finally, at the end of the film, Natacha realizes her love for Caution and therefore her desire, and from this her sense of individuality. She is saved, racing from Alphaville with Caution while the city is destroyed behind them. She tells Caution “Je vous aime” (I love you), showing that as she leaves the city the emotion that is taken away from Alphaville returns to her and she is finally able to rediscover her feelings. Richard Brody equates the feeling of love to enlightenment, writing, “In *Alphaville*, the light of love is the light of enlightenment, depicted as a form of natural light that breaks through the fluorescent confinement of the technological tyranny.”[9] Godard visually depicts Natacha’s newfound free thought by using natural light to describe love when Natacha asks what love is, and darkness or fluorescent light when showing the tyranny of the computer. The visual portrayals of the concepts in Godard’s narrative help the viewer to comprehend the connection between love and enlightenment that he draws.

Natacha is enlightened when she breaks out of the one-dimensional thought that Alpha 60 forces onto the people. The term “one-dimensional thought” was brought about

[9] Brody, Richard. *Everything is Cinema: The Working Life of Jean-Luc Godard.* Faber and Gaber Limited. 2008. Pp. 232.

by Herbert Marcuse in his *book One-Dimensional Man: Studies in the ideology of advanced industrial society*. Douglas Kellner explains:

> For Marcuse, one-dimensional thought and action derive their standards and criteria from the existing society, eschewing transcendent standards and norms. Critical and dialectical thinking, by contrast, postulates norms of criticism, based on rational potentials for human happiness and freedom, which are used to negate existing states of affairs that oppress individuals and restrict human freedom and well-being. Dialectical thought thus posits the existence of another realm of ideas, images, and imagination that serves as a potential guide for a social transformation that would realize the unrealized potentialities for a better life.[10]

Without thinking critically about one's everyday experiences and way of life, the people in Alphaville are left empty and vacuous. Being able to ponder on existence, and then compare those thoughts and criticisms to art is one way that subjectivity manifests itself. Another facet of subjectivity is knowing one's cravings or desires. Godard is pointing out that our differences in understanding experience, i.e. subjective understanding, are what makes us more than machine, and more powerful than machine.

As the lines have blurred between human and technology, especially since computers became widespread and technology began to globalize the world, it is harder to differentiate the two. That blurring has raised important questions that will remain important in the coming future, such as what makes a being human. There is anxiety in the viewer when there is a blur between the human and technology because we are getting

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[10] Kellner, Douglas and Herbert Marcuse. "*Introduction to the Second Edition". One-Dimensional Man: Studies in the ideology of advanced industrial society.* Routledge & Kegan Paul/Beacon Press, 1991. Pp. xvi – xvii.

closer and closer to the point where that blur may arise in our lives as well. Cinema is a window through which we can see one of an infinite number of futures. Using some of those futures, such as those shown in *Blade Runner 2049* and *Alphaville*, we try to understand what makes us human. Subjective experience is what will in the future, according to the imagined futures that we can peer through today in science fiction film, separate us from technology. When technology is able to have subjective experiences and believe itself to be human, the lines will have blurred so much that technology and humanity will be indistinguishable, and therefore inseparable, from one another.

The human mind as a vessel for technology

While *Blade Runner 2049* implies that subjective memory is what makes a being human and *Alphaville* maintains that subjective thought is what defines humanity, *La Jetée* (1963) by Chris Marker takes the human brain and its subjective memories and portrays them as a type of technology in and of itself. It does so through exploring the temporal displacement (time travel) that takes place in the human mind.

The concept of time travel was popularized by H. G. Wells in 1895 with his book *The Time Machine*. He coined the term “time machine”, which is nowadays is accepted as any machine in which the operator can travel forwards or backwards in time. H. G. Wells’s concept of time travel and the machine with which it is performed has defined time travel in film, in which the protagonist will go into some sort of typically large machine, full of electrical wires and often with a room full of computers backing it up, in order to travel through time. Classically, the machine will have lights blinking and buttons all over, making it look intricate and therefore more technological. This can be seen in *Back to The Future*

(Zemeckis, 1985) and *The Time Machine* (Wells, 2002). Even the bizarre organ-like structure in *Je t'aime, je t'aime* (Resnais, 1968) is shown with dozens of wires connecting to a room full of computers where blue lights flash against dark stone walls.

In *La Jetée*, Marker chooses to replace the machine with the human mind. Most importantly, he takes advantage of the subjectivity of the human mind and its labyrinth of memories past and unforeseen futures. This is revolutionary because it is the first time that time travel is shown to take place scientifically in the mind.[11] The film is placed in a post-World War III Paris where survivors live underground as the city is destroyed. The scientists that are in charge of the underground tunnels and caves are looking for a human subject that can endure the mental difficulties of the time travel experiments. They are researching time travel in order to contact a future society who can help them rebuild the present one. They finally choose a prisoner, referred to simply as the Man; the Man has a rather hazy past, but focuses obsessively on a memory of his father taking him to the Orly airport where he sees a beautiful woman on the airport jetty before he witnessed a man die. This moment marks the beginning of the film. The narrator says, "[…] the sudden roar, the woman's gesture, the crumpling body, and the cries of the crowd on the jetty blurred by fear. Later, he knew he had seen a man die. And sometime after came the destruction of Paris."[12] The

[11] In earlier films, characters time travel in a variety of ways. In *Just Imagine* (1930) by David Butler, a man is struck by lightning and wakes up 50 years later. In *Time Flies* (1944) by Walter Forde and *The Time Machine* (1960) by George Pal, the protagonists use time machines. *Ali Baba Goes to Town* (1937) by David Butler has a hobo fall asleep and wake up in the 8th century. The list goes on, yet none of the films showed a scientific way of time travel using the human mind.

[12] « […] avec ce bruit soudain, le geste de la femme, ce corps qui bascule, les clameurs des gens sur la jetée, brouillés par la peur. Plus tard, il comprit qu'il avait vu la mort d'un homme.
Et quelque temps après, vint la destruction de Paris. »

scientists explain to the Man why he was chosen and the narrator [13] (Jean Négroni) explains in a voice over, "The camp police spied on even dreams,"[14] meaning that the Man's memory of the woman was so overwhelming that his thoughts perpetually drifted to her even when he was dreaming. The narrator puts into question whether or not this memory is even viable, saying that the Man found that, "[the woman's] face was the only peacetime image to survive the war; he asked himself for a long time if he has really seen it or if he had invented that tender moment to prop up the madness to come."[15] As this occurs at the beginning of the movie, the viewer is left questioning the validity of the Man's memories, and therefore the time travel that takes place through his memories. Though the Man's memory is uncertain, the jailors choose him because of the strength of his fixation on it. It is not the sureness with which he holds the memory, but simply his obsession with it that gives him the means to succeed in time traveling.

The audience is left without an answer as to why the Man is stuck on this memory; they don't know if the obsession stems from the fact that her face was the last thing he saw before witnessing a man's death, if he immediately fell in love with the woman though he was just a child when his father took him to the Orly airport jetty, or if it was just an unexplainably memorable moment. The Man questions his own memories and dreams, and at the end we find out that though he is presented as obsessing over the woman, he is actually also fixated upon the point that he saw his own death. He doesn't know that,

[13] To match the vagueness that surrounds the Man, the audience also has no idea who the narrator is. He has access to the Man's thoughts, but he refers to the Man in the third person which gives the impression that he is not the Man himself.
[14] « La police du camp épiait jusqu'aux rêves. »
[15] « Ce visage qui devait être la seule image du temps de paix à traverser le temps de guerre, il se demanda longtemps s'il l'avait vraiment vu, ou s'il avait créé ce moment de douceur pour étayer le moment de folie qui allait venir […] »

however, until he has the possibility to go back to the past and he discovers that the man whose death he witnessed is actually his own death. He realizes all of this at the moment he dies as the narrator explains, "And when he recognized the man who had trailed him since the underground camp, he understood there was no way to escape time, and that this moment he had been granted to watch as a child, which had never ceased to obsess him, was the moment of his own death."[16]

The Man goes through several experiments and eventually achieves reaching a pre-war time. Marker illustrates time travel with a distinct lack of machinery, instead having a simple padding over the Man's eyes and one simple wire attached to the padding in the center of each eye. Marker's depiction of time travel diverges from that of the traditional portrayal, making his choice a commentary on the fact that the human brain and mind is itself the time machine. The scientists use the Man's brain as the vessel for technology and the Man's memory as their way to access different points in time. The Man is temporally displacing himself on a cognitive level. To reach the past, the Man must travel into his memory. The first time he reaches the pre-war time of the moment that he sees the woman on the jetty, the narrator states, "Other images arise, merge, in a museum which is possibly that of his memory."[17] His travels are equated to traveling through a museum and seeing the art on the walls. For the Man, each piece is another memory: a face, a bedroom, birds.

Before the concept of the time machine, another type of temporal displacement has always been possible. When the human mind thinks of a future event in the past tense, for

[16] « Et lorsqu'il reconnut l'homme qui l'avait suivi depuis le camp souterrain, il comprit qu'on ne s'évadait pas du Temps et que cet instant qu'il lui avait été donné de voir enfant, et qui n'avait pas cessé de l'obséder, c'était celui de sa propre mort. »

[17] « D'autres images se présentent, se mêlent, dans un musée qui est peut-être celui de sa mémoire. »

example, we are, subjectively, being temporally displaced. Saying, "By December, he will have returned" is talking about a future event (returning) in the past tense (have returned), meaning we have situated ourselves in the future. Another such displacements occurs when we use the future-in-past tense which is defined in Linguistics as "an absolute-relative tense that refers to a time located in the future, relative to a contextually determined temporal reference point that itself must be located in the past relative to the moment of utterance."[18] This is referencing a past event and speaking about the future in relation to that past. Another example would be when we silently let ourselves fall into our memories, reliving a certain moment or situation. Following this line of thought, *La Jetée* can be considered as simply a modern permutation of this preexisting form of time travel – that of the innate cerebral capability to temporally displace oneself. Bruce F. Kawin and Howie Movshovitz distinguish between time and memory, specifically in *La Jetée*: "There is an important difference in this film between memory and time. The hero is not sent into his memory; rather his memory is used as a force that helps him to re-enter the past. When in a peacetime garden, for instance, he "remembers that there were gardens," the subject is not reverie but actual time travel, and his memory functions equally well in past and present times."[19] By thinking of time travel as temporal displacement that is occurring in the mind, the viewer is reverted to the original time travel as opposed to that of the modern-day time machine. Marker equates memory with time as well as the mind's capability to subjectively

[18] "Future-In-Past Tense." *SIL Glossary of Linguistic Terms,* 10 June 2016, glossary.sil.org/term/future-past-tense.

[19] Kawin, Bruce F. Selected Film Essays and Interviews, Anthem Press, 2013. Pp. 51 -52. ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/emory/detail.action?docID=1130115

temporally displace oneself with time travel. He also likens the [Man's] brain (human) to the time machine (technology).

To bring his point home, Marker again goes counter-culture. *La Jetée* is a *photo-roman*[20], which calls to light the way that our minds normally interpret cinema. A film is comprised of thousands of still images that, played very quickly at 24 frames per second, are interpreted by our brains as fluid motion pictures. Our brains are the technology that make cinema possible. Objectively, cinema isn't fluid but simply many still pictures. Subjectively, however, we interpret cinema as fluid motion. Marker's stunting of the fluidity of cinema by simply showing images pieced together by music and a narrator, with each image lasting an average of between 2 and 6 seconds per image, calls attention to the way that we interpret cinema in a way that using the standard or typical cinematic experience style wouldn't have. Although most people would think that cinema necessitates moving picture, Marker breaks this assumption. Peter Wollen, in a discussion of *La Jetée,* reckons that "movement is not a necessary feature of film."[21] It also underlines the fact that our subjectivity makes us completely unreliable, as our interpretations of cinema are objectively fictitious.

Like Wollen, Raymond Bellour finds that movement is not central to cinema, but believes instead that time is central. He writes about the truth, which is what gives stability to the spectator's otherwise unreliable view, "Thus cinema is the truth 24 times per second only because photography – the photography within cinema, in other words the still frame –

[20] A *photo-roman* literally translated means "photo-story"
[21] Wollen, Peter. "Feu et Glace," *Photographies*, vol. 4 (March 1984) ["Fire and Ice," *Other Than Itself: Writing Photography,* ed John X. Berger and Olivier Richon. Manchester: Cornerhouse Gallery, 1989. Pp. 120.

is endowed with its paradoxical truth: both fixed (in space) and moving (in time)."[22] He writes, "[The photograph] does not shadow time, as film does: it suspends it, breaks it, freezes it, and in this way "documents" it. It constitutes, in a way, a kind of absolute truth about each of the instants it captures."[23] The photographic style of the film allows for some truth and reliability in contrast with the Man's subjectivity (and the uncertainty that stems from it).

Although the medium of the photograph gives some reliability to the viewer, the viewer is still unsure of the validity of the Man's time travel/memories until the very end of the film when he returns to the past where he appears on the airport jetty where he remembers seeing the woman for the first time. He registers that his child self must also be there. However, distracted by his obsession with the woman, he begins to rush over to her when he realizes that one of his jailers from his post-war time is also on the jetty and about to kill him. In the few moments before he is killed, the viewer is given proof that in fact this temporal displacement is not only subjective, but real, as the Man is killed. Marker ends the film by giving the audience the answer to the last question that they have, that of whether the Man has truly been time traveling or simply dreaming. The Man has been exploring the depths of his memories and also truly time traveling, meaning that the brain was the only technology he needed to travel in time.

Marker allows for the temporal displacement in *La Jetée* to take place completely within the human brain. Luc Besson's *Lucy*, 51 years after Chris Marker's *La Jetée*, similarly uses the concept of the human brain as the technology that allows its protagonist to time

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[22] Bellour, Raymond. *Raymond Bellour: Between-the-Images*. Translated by Allyn Hardyck, JRP/Ringier, 2012. Pp. 172.
[23] Ibidem. Pp. 173.

travel. For Besson, his representation of the brain as technology is a more literal than Marker's. He has Lucy transmit, very visually, her entire brain's worth of knowledge into a computer. At the end of Besson's *Lucy*, Lucy's body has become a black mass that takes over any source of electricity or energy and is building itself into a supercomputer. As Lucy reaches 100% cerebral capacity, her body completely disappears and her dress falls to the floor, empty. Lucy has transferred all her knowledge into a giant black computer stretching two or more meters high in the middle of the room This process specifically is called uploading, or "the process of transferring an intellect from a biological brain to a computer."[24] The concept of uploading stems from transhumanism, introduced in its modern meaning by Max More in 1990 and defined as "[…] a class of philosophies of life that seek the continuation and acceleration of the evolution of intelligent life beyond its currently human form and human limitations by means of science and technology, guided by life-promoting principles and values."[25]

The computer is the embodiment of transhumanism, which is the concept that permeates Lucy as she rises far above the capabilities of other humans. Reaching 100% of cerebral capacity allows her to transcend all human aspects, not only mentally but also physically, as she no longer needs a body by the end of the film thanks to her omnipresence. Since she is all powerful, she could have easily transferred her knowledge into anything or anyone. However, Besson chooses to have all of her knowledge go into a computer. This

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[24] This is the definition used, but not cited, in:
Thweatt-Bates, Jeanine. *Cyborg Selves: A Theological Anthropology of the Posthuman.* Routledge. 2012.

[25] More, Max. *Transhumanism: Towards a Futurist Philosophy.* Essay. Mac More, Ph.D. 1990. The idea itself predates More, existing, for example, as a concept in *Neuromancer*, written in 1984 by William Gibson. It also arguably appears in *L'Eve future*, written by Auguste de l'Isle-Adam in 1878, wherein an android is endowed with the spirit of a human.

allows the viewer to have a visual representation of her brain and its knowledge in the form of a supercomputer. In having the spectator visualize the human brain as a computer, Besson equates the human and technology. It's not the first time in the movie that Besson ties her brain to technology. Indeed, her increased cerebral capacity allows her to visualize all of the phone calls and connections around her, pluck through them and listen to a phone call by scanning the data on the stream she is manipulating. She can control energy and waves, projecting herself onto TV screens across the world. In the end though, he compares her brain to technology by having her body literally feed off of every technological instrument and every power source in the room before transforming into the most quintessential technology there is: a computer. This graphic depiction of the connection between Lucy's brain and a computer reinforces the likening of human to technology in an imagined, technogically-advanced possible world.

Moments before this transformation, as Lucy captures the last few percentages of her cerebral capacity, she is able to control time. The viewer wonders if the time travel is taking place inside or outside of her mind, as they did with the Man in *La Jetée*. In *Lucy*, it is easily arguable that the time travel is taking place in her mind. She sits in a chair, slowly becoming a computer, but in her mind she is able to speed through time. She goes back and meets the first ape, named "Lucy", and even returns to the beginning of time and watches the Big Bang from her chair. All of this occurs in her mind, the viewer presumes, because Besson cuts back and forth between her trip and shots of her sitting in the room with the scientists, slowly taking over all power sources and building the supercomputer.

The science-fiction films that we have analyzed make a direct commentary on the brain being technology itself, seemingly being both the original and ultimate technology. In the films, human brains are the time machines and the human's memories are the

playground on which the technology operates. Outside of the films, there is a meta-commentary hinted at that gives us a real-life example of our brain's power. So, we conclude that while subjective memory formed through experience, though linked through production by the brain, indicates humanness or humanity, our brains themselves are a form of the technology, both in and outside of the films. The trend that we have observed and analyzed throughout this chapter is that human and technology are becoming more and more intertwined, to the point that the viewer is oftentimes unsure of what is technology and what is human. Furthermore, sometimes the technology is represented as human itself, making the differences between the two completely unrecognizable. Through the imagined futures in Francophone science fiction film, technology and human have become inseparable and the pair oftentimes have capabilities that are far beyond those of the technology that existed during the film's day and age. We now can identify what technology is, and so follows the question of what is technology is imagined as being able to do and what abilities it will be portrayed as having.

Chapter 2: Divine Technology

> Science-fiction is a realistic painting of our possible futures, the result of a state of mind, that is, an attempt to know the present through the future or a certain image of the future. [26]

In *Metropolis* (1927)*, Alphaville* (1965)*,* and *Lucy* (2014) the technologies have explicitly post-human depictions. By post-human, I mean that there exists a line of evolution that humanity follows: from microorganisms, to Ediacaran animals, to fish, to land animals, to the first primates, and finally to humans. Humanity continuously asks "What is coming next?" and "What is our future?" Technology, which has always pushed our ways of living forward from the moment of the first tool, is the resounding answer. With technology, we are gaining the abilities to do things that humans cannot do without help, such as processing data quickly and making well-informed decisions. These capabilities make an impact on all parts of our lives, with well-known examples being the technology for better vision or hearing, self-landing rockets, mass communication through the internet, virtual and augmented reality, and artificial intelligence. These abilities that we are moving towards [evolutionarily] are getting closer and closer to the abilities that we imagine a god would have. Furthermore, the abilities that humanity assumes gods of having are similar to the abilities that modern technology now has. Humanity is mimicking divine abilities in technology. So, the question arises that if the future is technology, is that technology divine? Likewise, in the future, will divinity be technology?

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[26] Millet, Gilbert and Denis Labbé, *La Science-fiction*, Belin, Paris. 2001. p.13.
« La science-fiction est une peinture réaliste de nos avenirs possibles, elle est le résultat d'un état d'esprit, c'est-à-dire d'une tentative de saisir le présent à travers l'avenir ou une certaine image de l'avenir. »

We will explore the films *Metropolis*, *Alphaville,* and *Lucy*, spanning almost a century, to interpret how the future is imagined and the role that technology plays in that future. Since we are looking at these films to figure out what humanity thinks will come next, we will explore them chronologically to see how the trends of representations of the future change throughout history. Starting with *Metropolis*, we see our past (the year 2000) represented as the future. From hand-operated machines, to more powerful AI (artificial intelligence), cinema allows us to see how we predicted the future in the past. We can follow cinema through history to explore trends of predicting the future and then use modern cinema to help predict the future and the technology therein. More specifically, we will examine the role of divinity in technology in imagined futures and evaluate how the future of humanity will be affected and subsequently what humanity's next step in evolution will be.

Divinity in Early Film

Divine undertones in science fiction film began as early as Fritz Lang's *Metropolis*, which is seen as a pioneer film in the science-fiction genre. Lang's biblical allusions are prevalent in the 1927 film, permeating the characters, the machines, and even the architecture. The upper city of Metropolis is a futuristic (for the time period) depiction of heaven itself. The Eternal Gardens, an almost magical place in the upper city full of beautiful plants, lights, and fountains, symbolize the Garden of Eden. Joh Fredersen, the city master, is in charge of the garden in the same way that God oversaw the Garden of Eden.

Joh Fredersen's son, Freder (Gustav Fröhlich), falls in love with a woman, Maria (Brigitte Helm), he sees in the garden. He goes underground in search of her and discovers

the previously unknown (to him) existence of the Heart Machine that powers the city. He watches as the machine overheats and morphs into Moloch, the Canaanite god of fire. People are fed into the mouth of Moloch, who is known for child sacrifice. The morphing of the Heart Machine into Moloch creates a visual association between the Heart Machine and a god and implies that the factory where the underground people work is a sacrificial temple to that god.

Eventually, Freder finds the woman that he fell in love with. She is standing among candles and giant crosses. She is preaching to the workers and her hands are stretched out, palms reaching up towards the heavens. The men fall to their knees in front of her. She is the picture of an angel, a shawl draped across her shoulders and arms that gives her the wing-like appearance of an angel with her arms outstretched. Words flash across the screen, reading "Today I will tell you the legend of the Tower of Babel…"[27] The Tower of Babel[28], as an explanation for why people speak different languages. In Metropolis city, there is a New Tower of Babel, not only named for but also structurally resembling the Tower of Babel as it is described in the Bible. She claims that a mediator is needed between the *head* and the *hands*. The head is the upper city, which houses those that hire the hands to build the tower. The hands are the lower city, or those that built the city, similar to the workers that were used to build the Tower of Babel. In the Bible, the Tower of Babel was a tower that would have reached the Heavens. Because the people were not doing as God commanded (to spread out around the world), he made them all speak different languages and scattered them about the world so that they could never return to the city that they were building and so that they completed his bidding by populating all corners of the world.

[27] "Heute will ich euch die Legende VOM TURMBAU ZU BABEL erzählen."
[28] Genesis 1:1-9

This is the story that the angelic Maria preaches to the workers below ground. She says "Head and hands need a mediator"[29] adding, "The mediator between the head and the hands must be the heart!"[30] This references the Heart Machine, the underground machine that keeps the entire city running.

Joh Fredersen (Alfred Abel), like God, fears that the lower city will not follow his leadership. So, following the story of the Tower of Babel, he comes up with a plan to dissuade the workers from what they plan to do. He creates a robot Maria and she becomes a Biblical femme fatale, just like the Whore of Babylon.[31] She causes destruction within the city and even causes the workers to destroy the Heart Machine.

The allusions that Lang draws to the Bible and the analogy of the heart being the mediator allows the audience to understand the role of the divine technology in *Metropolis.* Freder, the figure of Jesus in this analogy, as he is the son of Joh Frederson, himself the equivalent of God, is proclaimed in Metropolis to be the mediator that Maria spoke of. Just as Christ is the Savior and Messiah who bridges the gap between God and mankind, Freder becomes the piece that unites the lower and upper city. Christ then represents the heart, which alludes to the Heart Machine being divine. At this point, divinity appears as biblical references, though that changes throughout time as culture, religion, and society's understanding of divinity change as well.

Several decades later, society's notions of both technology and divinity have evolved. In Jean-Luc Godard's *Alphaville* (1965), an all-powerful computer called Alpha 60 runs the city of Alphaville. Unlike the hand-operated technology in Metropolis, Alpha 60 is a

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[29] „Einen Mittler brauchen HIRN und HÄNDE."
[30] „MITTLER ZWISCHEN HIRN UND HÄNDEN MUSS DAS HERZ SEIN. "
[31] Chapters 17 and 18, Book of Revelation, New Testament. There is a link between Maria and the Whore of Babylon because people often think that Babel is equivalent to Babylon.

fully autonomous AI. Created by Professor von Braun (Howard Vernon), it makes all the rules in the city and is the only form of government. The computer takes away all the emotion from Alphaville in order to de-individualize the humans. The city's motto, displayed on a placard at the beginning of the film, is "Silence, Logique, Sécurité, Prudence" (Silence, Logic, Security, Prudence).

Godard interjects visual symbols to stress the importance of logic and to emphasize Alphaville's ideology. The symbols that occur the most often are the arrow and the equation. The arrow always points to the 'correct' path, eliminating all choice and therefore the freedom to choose. The lack of choice inhibits free thought and autonomy. The other image of Alphaville's ideology is that of the equation $e = mc^2$ which, as the world's most famous equation, represents logic and reminds the spectator that in science, an answer is either right or wrong. The only rational choice is the one dictated by math and science. Science is portrayed as existing to take away choices and show that there is only one logical way of living.

Alpha 60 removes the past and future from its citizens' minds with the dogma "no one has lived in the past, and no one will live in the future. The present is the form of all life"[32]. This reinforces Alpha 60's idea that "One should never say why; but only because."[33] No one needs to ask *why* when they have no past to compare it to and no future to hope for. By making everything temporally exist in the now, one is left without curiosity which stems from past about the present or the future. It gets rid of alternate possibilities because

[32] « Personne n'a vécu dans le passé, personne ne vivra dans le futur ; le présent est le mode de toute vie. »
[33] « Il ne faut jamais dire pourquoi mais parce que »

now is already now and there is no other form of now. No alternate possibilities means no choice.

Furthermore, choice is taken away by the removal of all forms of free thought. For example, anyone who shows emotion or in any other way does not fit the norm is encouraged to commit suicide by other citizens. Most interestingly, any words that could evoke an emotional response are banned. A list of words, and therefore thoughts and ideas, that are permitted are kept in a book. Godard introduces this concept when Natacha von Braun (Anna Karina) wants to look up a word that Lemmy Caution (Eddie Constantine) uses, *conscience*, to try to understand the idea that he wants to convey.

In this scene, the daughter of the creator of Alpha 60, looks around the room. After being asked what she is looking for, Natacha von Braun responds, "I'm looking for the Bible to see if it's in it."[34] Caution doesn't understand what she is looking for inside the Bible, and after asking, she explains that she wants to know if the word that she's looking for is inside. She continues to look around the room, saying, "Where is it? Normally there is one in every room."[35] Right as she finds it, a hotel employee brings breakfast into the hotel room, with a new version of the Bible sitting on the rolling breakfast table. Seeing Natacha read from the old one, he snatches it out of her hands and gives her the new one. She cannot find the word "conscience" within either the old or new Bible.

After finding that the word no longer exists in the Bible, she slowly walks towards the window saying "So no one here knows the meaning of the word conscience…"[36] When Caution takes the Bible, he looks inside with confusion and then says, "This isn't a Bible, it's

[34] « Je cherche la Bible pour voir si c'est marqué là-dedans. »
[35] « Où est-ce qu'elle est ? D'habitude, il y en a toujours une chez tout le monde. »
[36] « Donc personne ici ne sait plus ce que ça veut dire le mot conscience…. Tant pis. »

a dictionary."[37] He immediately questions Natacha, wanting to know the book's use. She responds "Almost every day, words disappear because they are forbidden. In their place, or sometimes even not, are new words expressing new ideas."[38] She goes on to explain that over the last months, some words that she was fond of had disappeared, such as 'weeping' and 'tenderness'.

Alpha 60's decision to exclude certain words from people's understandings portrays the machine as godlike because, according to the Bible, God gave language to people when he first created them. Also, in the same way that the concepts in the Bible are those that God wants his disciples to uphold and live by, Alpha 60 controls the way that the citizens of its city live by suppressing certain concepts and therefore only allowing them to be aware of those of which Alpha 60 approves. Essentially, it controls the way that they live by controlling the way that they think. Just as disciples or adherents of religion follow their God(s) with unquestioning reverence, the people of Alphaville hold the same attitude towards Alpha 60. Their compliance to Alpha 60 is kept on the straight and narrow by their obedience to the ideas and concepts that are present in the language given to them. Blind obedience is a repetitive theme, shown anew by the scientists who, though they understand Alpha 60 better than anyone else in the city, still find the computer to be too intricate for them to truly grasp what the machine is doing. The citizens of Alphaville follow Alpha 60's rule with unquestioning faith and total compliance even though they do not know how the computer works or why it makes the choices that it makes.

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[37] « Ca n'est pas une bible, c'est un dictionnaire. »

[38] « Mais voilà, presque tous les jours, il y a des mots qui disparaissent parce qu'ils sont maudits. Alors à la place, ou même pas forcément, on met de nouveaux mots qui correspondent à des idées nouvelles. »

The reason that *Metropolis*'s Heart Machine and characters, and *Alphaville*'s Alpha 60 and dictionary-like Bible, are important is that they show us how technology was represented in the past depictions of futures. Since the beginning of science-fiction film, technology has been repeatedly represented as divine in the future, first with biblical references and eventually in subtler ways, such as omniscience, light, colors, and abilities such as those that we will see through *Lucy*. The godlike technology in *Alphaville* and *Metropolis* appears as more traditional machinery. In later films, such as those of Besson, the technology is depicted as human, female, and divine. Because *Metropolis* and *Alphaville* are older films, the technology at that time was less advanced and therefore futuristic technology was not yet often being imagined as intermixing with human. In modern times however, our technology is often used in conjunction with humans so the portrayals seem less far-fetched. We have discerned what technology is and how is has been represented in the past as divine. In the future then, we want to deduce what being represented divinely will mean as far as capabilities for future technology.

One aspect of the divine technology that the films explore is the idea that technology is omnipotent and evil. This combination of omnipotence and evil generates a dystopian setting. As utopia is an imagined perfect world or place, its opposite, dystopia, is an imagined unpleasant world or place. Oftentimes, dystopian or utopian places go hand-in-hand with science-fiction film because, as Natacha Vas-Deyres, author of *Ces Français qui ont écrit demain: Utopie, anticipation et science-fiction au XX^{e} siècle*, writes, "Utopia and science fiction have grown closer with scientific and technological progress. Science brought data to utopian spirits that made them imagine a better world in which technology would

supplant man to bring him happiness."[39] As science brought a technologically advanced world to the minds of those thinking about utopias, it also then brought technologically dystopian worlds into play when the technology develops in an undesirable way. Dystopian themes in science fiction can be traced to the late 1800s in books such as Jules Verne's *The Begum's Fortune* (*Les Cinq cents millions de la Bégum).* The dystopian/utopian setting relies heavily on point-of-view. In *Alphaville*, if the story had been told from the point of view of the Alpha 60 computer, the city would have seemed like a perfect world, a logical utopia where an outsider barged in and destroyed it. The same goes for *Metropolis*, where from the point of view of Joh Fredersen, the city of *Metropolis* would have seemed like a heavenly city, a utopia where the underground workers were ruining the peace. Therefore, the way that the director chooses to portray the dystopia/utopia to the viewer is reflective of how they want to depict the technology. The viewer's understanding of who the protagonists are is therefore paramount: it can change the film's setting between utopia and dystopia, which then affects the way that the technology is seen as either negative or positive.

Divinity in Recent Film

A few decades after *Alphaville*, technology had changed significantly again and the way society imagined technology in science fiction has changed as well as we can see in Luc

[39] Vas-Deyres, Natacha, et al. *Ces Français qui ont écrit demain : Utopie, anticipation et science-fiction au XX^e^ siècle*. Honoré Champion, Paris. 2012. Pp. 23.
« L'utopie et la science-fiction se sont rapprochées avec les progrès de la science et des techniques. La science a apporté aux esprits utopiques des donnés qui leur ont fait imaginer un monde meilleur où les techniques suppléeraient l'homme pour lui apporter le bonheur. »

Besson's *Lucy* (2014). Computers had become household machines, and the world of science-fiction film, television, and novels had opened up as technology became more and more widespread. This progress in technology means that technology began to be represented very differently in the Contemporary Period of cinema. One such example is in *Lucy,* where Besson incorporates a divine and woman-formed technology and predicts that transhumanism (though the term itself is not explicitly used) will be humanity's next move. As mentioned earlier, transhumanism is the theory that the human race can use science and technology to push through its current physical and mental limitations. *Lucy*'s premise of a synthetic drug allowing Lucy to use more of her cerebral capacity represents transhumanism. After being kicked in the stomach, the drug that she was carrying begins to leak into Lucy's body, allowing Lucy to obtain capabilities that the rest of humanity does not have. She is able to manipulate electrical currents, physical elements, and eventually even the space-time continuum itself. Most importantly, Lucy's transformation makes her omniscient. Lucy refers to her transcending act, saying that her newfound knowledge makes her feel "less human".

Shedding all the aspects that make her human, she transcends her humanity more and more. At the beginning, she is represented as an animal, wearing a cheetah jacket while the shots cut between her and a wild cheetah hunting its prey. She is also connected to the first primate, Lucy. Her portrayal changes from dumb animal to human, but only stays briefly as human. She wakes up with the drug packet inside her body (a drug "mule") and seems nervous and scared, but doesn't seem to want to run, like an animal trying to flee. She just tries to process her situation. She is full of confusion and hatred when she is sitting in the cell she gets beaten and the drugs begin to leak into her system. These few minutes between waking up and being beaten are the only times where the viewer identifies with

her. After the drugs are released into her system, she becomes more and more godlike, so the viewer is unable to continue identifying with her. Escaping the jail cell, she kills her jailer, walks out into the main room and shoots everyone there. Then she sits down and eats, with the dead men lying on the floor in blood. When she begins to lose her humanity, she begins to transcend humanness, leading her to a posthuman state on her journey to 100% cerebral capacity.

In fact, her motivations are relatively unclear to the audience. She is going to reach 100% cerebral capacity whether she wants to or not. The viewer is unsure whether or not she really even wants to survive. It is unsettled until the end, even, that she is trying to get to a point where she can upload all of her knowledge. Her entire purpose seems to culminate in transcending humanity completely by literally disappearing from her human body and turning into an omniscient supercomputer. It's debatable whether she wants to save herself out of curiosity, to understand her power, or to save the world because the viewers are not convinced that she ever wanted to save herself or that she has curiosity left in her. In fact, we don't know what Lucy is supposed to do when she becomes omnipotent and omniscient.

The transhumanistic transformation follows along chronologically with the movie. The idea is that humans have potential that goes further than that of their biological nature. As we mentioned above, Lucy begins the movie dressed in a cheetah-print fur vest and her introduction is cut with a cheetah hunting prey. Throughout the transformation, the film cuts to scenes of the wild, making an analogy of the way that humans and animals behave. Her starting point is animalistic and then, throughout the movie, she comes to embody all of evolution. She finally culminates in divinity. This divinity, in relation to the correlation of human and animal, makes her something that surpasses that correlation: it makes her

posthuman. The idea of the divine, posthuman woman has existed from the dawn of Western culture.

Hesiod's Pandora was, in Greek mythology, the first woman created by the gods. Fabricated by the gods, Pandora was the first artificial woman. In "Pandora's Fireworks; or, Questions Concerning Femininity, Technology, and the Limits of the Human", Elissa Marder writes:

> From the beginning, therefore, Pandora, the first woman, occupies a paradoxical position in relation to the invention and the figuration of the human. Although her arrival precipitates man's fall into the human condition, and although she incarnates all of the ambiguities that are associated with "human nature," she herself is neither human nor natural. Commissioned by Zeus and fabricated by Hephaestus out of clay and water, this first woman, first of the race of all future "human" women, is an entirely manufactured product. [40]

Pandora, the first woman technology, separated human from animals and gods. Formed by the gods, and endowed with gifts from them, she exists as the first "living machine."[41] *Lucy* can be seen as a modern example of the link between woman and machine, and between woman machine and the divine, that has always existed.

Lucy's journey to divine computer is well-documented. The numbers flash on the screen leading up to 100% cerebral capacity, allowing the audience to know exactly how far between human and divine computer she has transitioned. The final moments spent in the high 90s percentage show the audience the way that human is going to transform into

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[40] Marder, Elissa. "Pandora's Fireworks; or, Questions Concerning Femininity, Technology, and the Limits of the Human." *Philosophy and Rhetoric*. Penn State University Press. 2014. Pp. 389. Volume 46, Number 4.
[41] Ibidem. Pp.397.

supercomputer. As Lucy transfers her knowledge, her body is slowly diminished, represented by a blackness that spreads over her. Finally, her body disappears completely and all that is left is a supercomputer. That supercomputer is shown to hold the all the knowledge in the universe, depicted as a USB drive that shows the depths of the universe within.

With all the knowledge in the universe successfully uploaded to a computer, Lucy is free to escape her human form. However, Besson doesn't end the film there. He takes it just one step further to show us that Lucy still exists. When Pierre Del Rio (Amr Waked), the policeman she enlisted to help her, asks where she went, she writes to his phone screen "I am everywhere". This shows the audience that Lucy is not gone, but just that she has escaped the bounds of human limits and is instead an omniscient being who exists everywhere.

An omniscient being that exists in all things is how many religious people would talk about their god(s). Omniscience is usually referred to in religious contexts because many people believe that being a god makes one omniscient and that to be omniscient, one must be a god. This theology is known as panentheism. Panentheism translates directly to "all in God". It is defined as "the theory or belief that God encompasses and interpenetrates the universe but at the same time is greater than and independent of it."[42] Showing that Lucy interpenetrates the universe instead of just having her disappear after transferring her knowledge is another nod to technology as divine within the movie.

At the end of the movie, Lucy sits in a chair and begins to race through time. She sits in Times Square, then moves back to the time of Native Americans, returns to the Jurassic

[42] *Oxford English Dictionary*. Oxford University Press. 2000.

Age, and finally comes to a stop directly in front of the primate Lucy. Her black rolling chair is sitting in the middle of a shallow marsh, but Lucy is unbothered, staring intently at the primate Lucy who is just feet away from her. The ape, Lucy, is known as human's first ancestor. Primate Lucy looks wary, but Lucy stretches out her arm and finger and lets it hang in the air in front of primate Lucy. Primate Lucy imitates the motion and stretches out her finger and arm at Lucy.

The camera, which until this point has been slightly off of parallel to the outstretched arms, cuts to be now directly perpendicular to the two Lucys' arms. With an up-close shot that makes the viewer acutely aware that the Lucys' fingers directly mimic Michelangelo's *The Creation of Adam*, the two Lucys close the final inches of distance. *The Creation of Adam* is supposed to illustrate the moment in which God created Adam, the first man. Besson underscores the biblicality of the moment by replicating such a well-known image. Using *The Creation of Adam* implies a religious undertone, equating Lucy to a god as she gives life to the female equivalent of Adam – the ape Lucy.

As the two Lucys touch fingers, Lucy is thrown from Earth and seems to circle around the earth from above, eventually zooming through the galaxy. She sees the universe's formation in reverse until the Big Bang and the first atom. Her ability to manipulate the space-time continuum equates her with the powers of a god. As panentheism theologizes, God and only God is greater than the universe. Logically following, only God can manipulate the universe, so as Lucy is speeding through the space-time continuum, she is reaching both 100% cerebral capacity as well as her ultimate purpose to become omnipotent, and therefore to incarnate divine technology. Although this film asks very good questions, it finishes without developing what Lucy's purpose is, what she does afterwards, or what the

divine machine will become. Whilst undeveloped, through this movie we can imagine the future of technology in science fiction film as divine.

Besson hints at the relationship between Lucy, the computer, and divinity with *The Creation of Adam* throughout the movie. Like his hint with the primate Lucy and the animality of Lucy's introduction, he uses light and color as symbolism for divinity. As Lucy reaches 98%, light bursts forth from her mouth and the space around her turns white. Psalm 27:1, one of the most well-known psalms, reads "The Lord is my light and my salvation [..]". In Isaiah 1:18, the Lord says that "Though your sins are like scarlet, I shall make them white as snow". Both light and the color white are often associated with god and with heaven. Light being most associated with God themselves and heaven, and white having connotations of pureness, innocence, and also of heaven. In *Lucy*, the connection between divinity and light must be extracted by the audience, even if subconsciously. Even Lucy's name has a connection to divinity. Not just the name of the human's first known ancestor, her name is the English and French feminine name derived from the Latin masculine name *Lucius*, which is a derivative itself of the Latin word "lux", or light.

In the end, Lucy's journey culminates in her becoming a machine, and therefore having transcended all humanness. Transcending humanness is equated to both reaching omnipresence and omnipotence. On her journey, Lucy is able to influence machinery, animals, people, technology, and energy – but not until the very end does she herself turn into technology. Besson has her turn into a computer at the exact moment that she completely transcends humanity and fully interpenetrates the universe. This is the final depiction of the divine computer.

In a last twist, Lucy's divinity, though continuously correlated with that of God through scenes like *The Creation of Adam* and light bursting forth from her mouth, ends

with an analogy to Lucifer, not God. Dressed in black from head to toe, except the crimson red on the bottom of her shoes, Lucy ends the film by uploading all her knowledge to the giant black supercomputer. The scientists question whether mankind is ready for the knowledge that she is about to give. Professor Norman (Morgan Freeman) says, "But all of this knowledge, Lucy… I'm not even sure that mankind is ready for it. We're so driven by power and profit. Given man's nature, it might bring us only instability and chaos." Lucy calmly responds to these worries, saying, "Ignorance brings chaos, not knowledge." This evokes the story of Adam and Eve, where Eve is tempted by a snake, often considered to exemplify the devil. The snake tempts her to eat from the tree of knowledge, and in doing so, original sin is brought into being. Lucy is, in essence, giving knowledge to humanity. She, like the snake (or Eve, depending on interpretation), believes both in the power of knowledge and believe that humankind has a right to that knowledge. In the Bible, it is the snake who tempts, but it is the fault of the woman which brings chaos, suffering, original sin, and the fall from Eden. Marder explains that Pandora, like Eve, "famously unleashe[d] all of the other "natural ills" that are associated with mortal life, such as illness and old age, when she open[ed] the lid of her notorious jar."[43] Lucy has a divinity in her, and it is that of the Tempter and the Tempted. To sum up, Lucy's divinity cannot be concluded to be exclusively morally good nor bad. Instead, she is represented simply as transcending humanness to a place of divinity, in relating her to biblical stories and by using godly visuals.

Throughout the history of science-fiction film, religion and divinity permeate the role of omnipotent technology. The technology takes many forms, but whether machine,

[43] Marder, Elissa. "Pandora's Fireworks; or, Questions Concerning Femininity, Technology, and the Limits of the Human." *Philosophy and Rhetoric*. Penn State University Press. 2014. Volume 46, Number 4. Pp. 390.

artificial intelligence, human, or computer, they are all portrayed as having divine aspects and elements to them. The viewer does not need to have conscious knowledge of the concepts of divinity to recognize that the technology is represented divinely. The technique that the films implement means that the mind's unconscious does the majority of the work. Biblical references, when stated explicitly or when implicit are recognized because the viewer has learned these conventions growing up. When the divinity is not biblical, the viewer still has the subconscious knowledge of certain traits, such as light, color, and images that have been connected to divine beings in their cultural surroundings.

The films and their connections to the divine lead us to several questions. Does humanity believe that technology is the closest thing we have to godliness? This would imply that as we become progressively similar to technology, we will also develop abilities that mimic those of gods. Technology has the power to process much more data than humans can. Modern technology can learn algorithms and models, but is also beginning to learn skills that we previous thought to be human-specific, such as reading emotions. We understand, with a mixture of dread and excitement, that technology not only has the power to learn, but that it can also create from what it learns. Therefore, the creation of art and music is no longer an impossibility for technology. Whereas creativity used to be deemed as a human specific trait, machine learning and neural networks have recently allowed computers to learn about art and actually create new art.[44] Computers make more logical decisions and can take more things into account when making decisions than humans can. Some of these capabilities match those of humans, while others surpass them. This

[44] Emerging Technology from the arXiv. "Can This Computer-Generated Art Pass the Turing Test?" *MIT Technology Review*, MIT Technology Review, 30 June 2017, www.technologyreview.com/s/608195/machine-creativity-beats-some-modern-art/.

leads to the next question: Does humanity believe that the next step in evolution is leaving our human selves behind and moving on to becoming more powerful and more godlike through the abilities that technology can provide? By looking through the trends of science-fiction film, we derive that the answer is yes. The explanation follows in two parts: first, why we can have confidence in the predictions that science-fiction film gives and second, why science-fiction's portrayal of technology is relevant in understanding humanity's next advance in evolution.

Much of past film's technology seems reasonable in reality. Many themes such as large factories with incredibly powerful machines, artificial intelligence, and surveillance of cities exist in our everyday lives. Other things, such as uploading our brains to computers and the like seem to be in the near distant future. From this, we conclude that the science fiction film that we produce now will, in the same way, both reflect and guide the way that our technology will continue to develop. We deduce that humanity believes that technology will continue to become more and more powerful with abilities rivaling those of divine beings. Just as technology used to be represented as machinery, and it became such, the fact that technology is more recently being depicted as human shows that humanity believes that our next evolutionary step will be to a both posthuman and transhuman technological state.

We have seen the cinematic trend of Francophone science fiction film imagining the posthuman and equating technology and divinity, but we have not yet understood the role of the woman in science fiction, specifically as it intersects with technology. Through Besson's *Lucy*, we saw an interesting parallel drawn within the film: just as the ape Lucy was presented as the first woman, Lucy herself is depicted as the first woman machine in her world, showing the crossover of woman and technology. We know what having technology

as human and technology as divine means in science fiction film, but we also want to determine what it means to have technology represented as woman. We wonder if the biases of today will either persist or cease to exist in the imagined and ever-evolving worlds on-screen.

Chapter 3: Technology as Woman

Of women in film, Sharon Smith writes "Women provide trouble or sexual interludes for the male characters, or are not present at all. Even when a woman is the central character she is generally shown as confused, or helpless and in danger, or passive, or as a purely sexual being."[45] The way that women are represented in film permeates all genres. However, science-fiction is part of *film d'anticipation* which, literally translated, is *anticipation film.* This genre, which is also a literary genre, consists of those works where the action takes place in a future time. Science fiction allows us a window into the future, where our dreams and predictions can materialize on-screen. It is both a reflection on and of society, as well as a conjecture on the development of society in the future; it allows us to understand certain aspects of society as well. Science fiction is also hard to define because it is often a crossover between different genres. It's a version of reality that is created, interpreted, and transformed by the camera. We expect science fiction to offer change, new ideas, and concepts and narratives that challenge societal norms. Science fiction could therefore easily represent women differently from other films. The subject of technology as woman was chosen precisely for this reason, because while looking into the future of science fiction, we want to see if science fiction will bring about a new way of seeing women. Although there is a strong link between technology and woman (Pandora), this does not exclude the possibility for a woman technology, or even a divine woman technology, to be represented in a feminist manner. Furthermore, the connection does not

[45] Smith, Sharon and Sue Thornham. "The Image of Women in Film: Some Suggestions for Future Research". *Feminist Film Theory: A Reader.* 1999. New York University Press. 2006. Pp. 14-15.

excuse the subversion of a technology woman's power. Since we will be focusing on technology represented as women, most of the women we will discuss fall into the "central character" category that Smith wrote about rather than those that exist to provide distractions to central male characters.

Throughout this chapter, we will analyze the way that woman technology (meaning a woman who is shown as having explicitly technological functions, more so than the functions connected with the pre-existing relationship between woman and technology) is exemplified in science fiction film. We will explore the woman technologies' lives in three parts. First, how does the technology come into being? Second, what does the technology do during the diegesis? Third, where does the film's denouement leave the technology? Any woman technology will be referred to as "her" rather than "it" for clarity.

Woman technology's debut

Technology may be brought into existence as parts being put together as a whole (a machine being built), within an incubator (technology that grows almost as a human would inside other technology), appear inherent to the film or the world within the film (where technology exists without an explanation of its appearance), or it may be transformed from non-technology into technology by mankind or other elements within the film. In Luc Besson's *Lucy*, Lucy (Scarlett Johansson) falls into the last category. She begins the film by being represented as very animalistic. She wears a cheetah-print fur vest and her hair is curly and untamed. As the viewer is introduced to her character, the film cuts to a cheetah hunting prey. A relationship is drawn between the dumb, human character of Lucy and animals in the jungle pursuing their most primal instincts. Even her name recalls the viewer

of an animal, as it is generated from the world's most famous Australopithecus afarensis ancestor; the primate is named Lucy.

These two animals, the cheetah and the primate, are easily recognizable in the film community. One of the most famous science fiction films to ever be made, *2001: A Space Odyssey* (1968) by Stanley Kubrick, opens with several short shots of landscapes and animals. Within only a moment of the movie, a cheetah attacks a hominid (a primate; great ape). The scene cuts to black, and this closes the first scene. The next dozen minutes or so show two packs of hominids, eating raw flesh and doing other animal-like things until they discover the first tool and weapon: a bone. With one of the most influential and well-recognized cuts in the world, the hominid throws the bone into the air after killing with it. The camera pans up as it flies into the air and then pans back down as it falls, suddenly cutting to a spaceship mid-pan. The cheetah and hominids are supposed to show the wild, primitive beginning of the evolution, before the first tool. The first tool led to the first weapon, which, with a cinematographic flourish, is linked to technology and the destruction that it can bring. So, the link between Lucy and the cheetah and the first primate, both relating Lucy to both the primitive animal that she is introduced as and foreshadowing the technology that she will become, as well as the destruction that she will bring.

Her appearance, apart from animalistic, makes her look weak and ditsy. Her clothes appear of poor quality and she looks entirely disheveled. As her capture begins, she handles it with an animalistic fear. She looks around her, searching for a way to flee, then begins to struggle and futilely fight against the several armed, large men that are taking her away. Besson chooses to start the transformation to technology with the embodiment of a vapid woman who handles the situation with a complete lack of competence or ability. The audience is shown that this transformation will start from a daft, animalistic being

(subhuman) and take her to the omnipresent, all-powerful technological being (superhuman).

As Lucy passes from animal to technology, the viewer lacks the opportunity to ever see her as woman. Her strength, independence, and intelligence only come from the technological side of her being. She is represented first as animal, then as machine. From incapable to a cold-hearted killer, she journeys through her quest to all-encompassing knowledge. The only moment that we see her interact with another woman (the only other woman present in the film, in fact), she is purely logical. Little room for personality or character, she instead continues quickly to her purpose. So technology she becomes, almost directly from animal. Though she passes briefly through a phase where she seems human, there is no real positive aspect about those few minutes that she seems human, and nothing that portrays her as feminine.

Throughout Lucy's transformation, she never ceases to be sexualized. Her boyfriend Richard stuffs cash into her breast in the first few minutes of the movie, even though she has a free hand. She is introduced in a short, tight dress that she clutches and pulls down as she stumbles into the bank that she is sent into with a case of drugs. During the fighting scenes, she wears a small black dress that shows off her figure and what are probably the most recognizable shoes in the world of woman's fashion: red-bottomed Louboutin Pigalle heels. Of this 100- to 120-millimeter heel, Christian Louboutin has expressly commented that it is not his job to create something comfortable.[46] About 50% of the audience asks themselves why Lucy is wearing some of the most uncomfortable shoes in the world to fight

[46] Alexander, Ella. "The Real Louboutin." *Vogue*, 24 May 2012, www.vogue.co.uk/article/christian-louboutin-painful-shoes-comfortable-shoes.

people whose intelligences she views to be as dumb as animals. We wonder how that question impacts the woman spectator's cinematographic experience?

Laura Mulvey writes about pleasures that cinema offers, the first of which is scopophilia. In his *Three Essays on Sexuality*, Freud coins the term *Schaulust*, meaning pleasure in looking, which has since been translated as scopophilia. Mulvey points out that cinema would seemingly not entertain the "undercover world of the surreptitious observation of an unknowing and unwilling victim" because "[w]hat is seen on the screen is so manifestly shown."[47] However, she goes on to remind us that "the mass of mainstream film, and the conventions within which it has consciously evolved, portray a hermetically sealed world which unwinds magically, indifferent to the presence of the audience, producing for them a sense of separation and playing on their voyeuristic phantasy."[48] The way that the cinema operates allows the viewer to have the impression of "looking in on a private world" and that "[a]mong other things, the position of the spectators in the cinema is blatantly one of repression of their exhibitionism and projection of the repressed desire on to the performer."[49]For the men in the audience, this is the appeal of Lucy and the reason for her so carefully depicted sexualization. There is an inherent pleasure for the male in looking at her in the dark theater, knowing that the details of her depictions are tailored explicitly to his gaze.

However, it's not just the male's pleasure that is catered to in *Lucy*. It goes further than that, actually taking away the pleasure that the woman spectator would get from identifying with Lucy. Mulvey finds that cinema not only appeases the primitive Freudian

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[47] Mulvey, Laura and Rachel Rose. *Laura Mulvey 'Visual Pleasure and Narrative Cinema' 1975.* Afterall Books. 2016. Pp. 11.
[48] Ibidem.
[49] Ibidem. Pp. 12

want for scopophilia, but it actually cultivates a narcissistic aspect in that scopophilia. On cinema's large, bright screen in the dark theater that overwhelms the spectator's gaze and effectively places them inside the world which they are peering into, cinema lures the spectator to identify with the character on the screen. At the same time that the spectator looks in on the film's private world, they become a part of it. Mulvey writes, "Jacques Lacan has described how the moment when a child recognizes its own image in the mirror is crucial for the constitution of the ego." The narcissism, and the pleasure from that narcissism are born from the ego itself. Mulvey finished her point, writing:

> Hence it is the birth of the long love affair/despair between image and self-image which has found such intensity of expression in film and such joyous recognition in the cinema audience. Quite apart from the extraneous similarities between screen and mirror (the framing of the human form in its surroundings, for instance), the cinema has structure of fascination strong enough to allow temporary loss of ego while simultaneously reinforcing the ego. [50]

She imagines the way that the spectator loses themselves in the narrative of the film while concurrently projecting themselves onto the character on the screen.

The pleasure attained from this give and take of ego is denied to the female spectator of *Lucy*. Indeed, while the scopophilia persists, the woman viewer is unable to fully identify with Lucy because of her portrayal, undermining the positivity of having a woman in the lead role. Because of the way in which the Lucy is introduced, the woman viewer does not immediately attach herself to the character. Whereas the male spectator possesses the gaze because he is a man, the female spectator must actively assume the

[50] Ibidem. Pp. 13.

male gaze by objectifying the woman as a man would. While the man's position is immutable, the woman does have the possibility to change her position. As the film goes on, the spectator begins to be able to imagine themselves taking part in the fantastical adventures until such a moment as that of Lucy's heels. These tiny decisions, that half the audience may not even notice, are starkly evident to the woman spectator. That half of the audience has undeniably had the repetitive and uncomfortable experience of being persuaded or coerced into some equivalent of an unwanted small black dress and tall black heels. So though but the smallest detail, the absurdity of an all-powerful technology woman wearing those shoes can't escape our notice. That is what the question of Lucy's shoe choice does to the female spectator's cinematographic experience. Though it may excite the male spectator, it takes away from the pleasure of losing oneself in the film and finding oneself in the character on the screen for the female audience; this, in turn, subverts the positivity of having a woman in a lead role.

And finally, the answer to the original question of why Lucy is wearing the Louboutins in the first place is that a tight, short black dress with Louboutins is the epitome of sexy. Her sexualization is carefully planned, down to the smallest details. The power she has that comes from technology is undermined by the way in which she is depicted for the male gaze. Her shoes are not vaguely apparent, either. They are the focus of multiple shots. While she walks down the hallway in the airport, the camera is a tight shot of the red bottoms of her shoes as she walks. When she disappears from the screen all together, the audience is left with a close-up shot of her red-bottomed shoes. One shoe is on its side, giving the audience a full-screen view of the entire bottom of the shoe which is colored red like the blood on Mr. Jang's (Choi Min-sik) face as he shoots at her empty chair. But for the red of the shoes and the blood, the rest of the room is white and black with the doctors

wearing white lab coats over their clothes. This makes imagery of the two splashes of red that construct the tie between Lucy's sexuality and destruction. We will see throughout this section that every woman technology is depicted sexually, and explicitly so.

This mixture of animal, machine, and divine makes up part of the premise on which the discussion of sexual difference is based. Pandora is the incarnation the aforementioned mixture and more. Hephaestus mimics the divine beauty of the goddesses while making Pandora. After she is made, she receives her name from the gods and several gifts. Of these gifts, Marder explains: "Although she is marvelously beautiful, she is also monstrous, because she combines divine, animal, and supposedly human qualities: she possesses divine-like beauty, a bestial, insatiable appetite for food and sex, a thieving "bitch-like" character; and a seductive voice that speaks only in lies (2006, 90-93 [ll. 60–68])."[51] These traits are what we see in the woman technology in the films being studied throughout this chapter. Her very existence introduces sexual difference, which is apparent in all of the films.

Leeloo (Milla Jovovich), from *Le Cinquième Élément* is also presented to the viewers as animalistic, yet just as sexy as Lucy. Her transformation to technology falls into the incubator category and as the audience is first introduced to her, she growls like a wild animal and is encaged like one, too. She crouches, squatting and pressing her hands against the glass with her head lowered. She lacks communication skills and doesn't seem to understand the body that she is in. Her extravagant red hair reminds the viewer of something a little foreign to a natural being, untamable and wild. Unlike Lucy, she does not

[51] Marder, Elissa. "Pandora's Fireworks; or, Questions Concerning Femininity, Technology, and the Limits of the Human." *Philosophy and Rhetoric*. Penn State University Press. 2014. Volume 46, Number 4. Pp. 391.

slowly become the technology that she embodies. Leeloo is already technology as soon as she appears. Her physical being is reconstructed from a hand, making her robotic in a sense of the term that she is a being constructed rather than born. As the scientist who is reconstructing Leeloo explains to his superior, her cells are too perfect: "Almost like this being was...engineered." Leeloo has been engineered into existence and then reconstructed from a tiny leftover piece of that design. Leeloo is the fifth element, the last piece of technology needed to use the other four elements against the great evil that descends upon the universe every five thousand years. Leeloo, like Lucy, does not ever seem to embody a woman. The only part of her that is feminine in her body itself. In the case of Leeloo and Lucy, technology takes over their bodies and therefore rids them of the only part of them portrayed as feminine.

To compare, when the technology is man, he carries certain traits with him. Although stereotypical, they are positive, strong attributes, such as personal growth, protection of the weak or of family and friends, or a fierce want to do what is right and moral.[52] The technology as woman, however, does not entertain these values. Lucy cares for no one, protects no one, kills without hesitation, and only has a want for omnipresence and knowledge. Disillusioned with humanity, Leeloo had actually decided at the end of the film to let evil win until a man convinced her otherwise. Our woman technologies have nothing like the portrayals of man: no positive stereotypes, no dearly held values, no self-improvement on their quests to save the world. From dumb animal to a logical-to-a-fault killing machine, Lucy's (nonexistent) womanhood does little to add to the film and has little

[52] Examples: *2001: A Space Odyssey* (1968) by Stanley Kubrick, *Star Wars* (1977 – 2005) by George Lucas, *Interstellar* (2014) by Christopher Nolan

to offer to the women in the audience. Leeloo's growth, from growling and caged to almost failing to perform her entire purpose and save the universe, is as inconsequential as Lucy's.

Leeloo's beginning is comparable in certain respects to a newborn's entrance into the world. She is mostly naked, with simple white bands covering her nipples and her genitals. She looks fragile and crouches into herself, almost in a sitting fetal position as if she is letting as little of her barely covered skin show as possible. Her total lack of ability to communicate reminds the viewer of a newborn and an animal.

This thin, waifer-y look was very in style in 1997, when the film was released. Kate Moss's rise to fame in the fashion and modeling industry amplified the call for size zero bodies. Her small frame and young, undeveloped looking body was the paragon of beauty and high fashion. Leeloo's frame is considered "in" in the beauty world when the film was made. Scarlett Johansson's curves, though popular in 2014, would not have been popular in 1997. The women in these films are often chosen for how well their bodies fit in to the current cultural vision of beauty. In Leeloo's case, her small and almost naked, newborn-like introduction was done to sexualize her as well as to bestialize her. This scene provokes two concepts that are seen throughout critical feminist film theory: voyeurism and fetishism. Her nakedness is shot beautifully and artistically, to allow the audience to take pleasure from her nakedness. This is the voyeurism in Leeloo's introduction; it mimics the scopophilia that was discussed in *Lucy*. Then, her clothing, hairstyle, and animal likeness fetishizes her, turning her animality into attraction.

The fetishism that Leeloo's introduction indicates stems from a deeply rooted issue. Mulvey explains that "in psychoanalytic terms, the female figure poses a deeper problem. She also connotes something that the look continually circles around but disavows: her lack

of penis, implying a threat of castration and hence unpleasure." [53] She continues to explain that there are two routes by which the male unconscious escapes:

> preoccupation with the re-enactment of the original trauma (investigating the woman, demystifying her mystery), counterbalanced by the devaluation, punishment or saving of the guilty object (an avenue typified by the concerns of the *film noir*); or else complete disavowal of castration by the substitution of a fetish object or turning the represented figure itself into a fetish so that it becomes reassuring rather than dangerous (hence over-valuation, the cult of the female star).[54]

The second route is what *Le Cinquième Élément* gives to its viewers: an already fetishized animalistic shell that transforms the female figure into something more manageable for the male psyche. This transformation allows the fetishistic scopophilia of the male audience, during which the male gaze looks upon Leeloo's overtly sexualized body and has no unpleasure.

Like Leeloo, a newborn or newly created replicant (Sallie Harmsen) is shown in *Blade Runner 2049*. Engulfed in a cocoon-like plastic sack hanging from the ceiling that has been vacuum packed, the viewer sees only the shape of a naked human whose curves are hugged by plastic. The replicant slides down from the sack and collapses onto the floor below while fluid drips from the sack. She lays on the ground, glistening and fully naked with her head and limbs lying limply to her sides. Her short hair is slick from the jelly-like substance in which she was encased. With a gasp, she takes her first breath and curls tighter into herself,

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[53] Mulvey, Laura and Rachel Rose. *Laura Mulvey 'Visual Pleasure and Narrative Cinema' 1975.* Afterall Books. 2016. Pp. 19.
[54] Ibidem. Pp. 19-20.

contracting her body as she comes to life. She replicates a limper fetal position and begins to spasm, like a scared animal. Her blind creator, Niander Wallace (Jared Leto), slides his hand around her face and over her body, saying, “Before we even know what we are, we fear to lose it.” Like a newborn animal, she has no idea what she is and no comprehension of the events going on around her, but her thoughts are driven to fear and self-preservation.

Every one of these women is introduced to the audience as a little less than human and underwhelming in their capabilities. Male technologies often enter the film as massive machines of justice and power (think *Transformers* (2007) by Michael Bay or *The Terminator* (1984) by James Cameron). The choice to introduce woman technology as weak and powerless enforces the gender stereotypes that plague women. Is there any reason, or rather excuse, for introducing Lucy, Leeloo, and the nameless replicant this way? One could argue that the juxtaposition between a weak beginning and a powerful end is a plot device that amplifies the woman’s eventual power. However, if that was the case, why are man technologies not introduced in the same way? One could argue that the reason for this is that the very concept of the human is defined as male and that at the heart of the definition of human there is a discussion of sexual difference. Therefore, when these films are discussing what it means to be human, they are in fact playing out the consequences of the contradiction between male and female. However, this does not change the way that these introductions subvert the power of the woman, nor does it take away from the viability of the bias that we perceive. In addition, the plot device can only be argued if the woman technology comes into power by the end and if that power is typified by goodness or justice. A man’s power is useful, used for justice and goodness. At the least, his strength is often unparalleled, except for by another of his kind. In the end, he conjures up his last bit of

strength or willpower to finish his job, whether it be saving the world, cleansing it of evil, or saving his family.

Woman technology during diegesis

The woman technologies' purpose is often tied to a man, meaning that she is not autonomously capable of completing her task without a man's help. Leeloo was genetically engineered once and then carefully reconstructed because she is the technology that can put the four other elements together and save the world from the great evil that is descending upon it. After journeying and fighting her way through the galaxy, she arrives at her final moment. The four elements (in the form of stones) are arranged and activated. All that is left to do to destroy the great evil is to combine the power of the stones, which is Leeloo's job and the sole reason why she was created. In her final moment, she refuses to cooperate because of all the violence and hatred she has seen during her journey. Only when a man, a flying taxicab driver (Bruce Willis) that she meets at the beginning of the film, declares his love for her and kisses her is she able to finally complete her task and destroy the great evil. Without the love of a man, her powers, and therefore she herself, are useless. To recap, this means that a perfectly genetically engineered female being is useless without the help of a completely average male counterpart. This narrative lacks any subversion of the female stereotype or conventions of woman in film. The narrative arrives at the most critical point in the film, the climax, only to convey the message that a superhuman woman will fail without her average male lover.

Leeloo's purpose is not stereotypically female. She has the same job as any other male science-fiction protagonist, to save the world, yet is unable to complete it without a

man and without a love plot. Lucy's purpose is less clear than Leeloo's. Although her goal is omnipresence, her purpose is more ambiguous. She is collecting knowledge as she passes through the different stages of her mental capacities. At the end of the movie, as she prepares to become omnipresent, she realizes that she must find a way to pass down her knowledge. Her knowledge that makes her feel less human. Lucy says, "It's like the less human I feel, all this knowledge about everything, quantum physics, applied mathematics, the infinite capacity of a cell's nucleus. They're all exploding inside my brain, all this knowledge. I don't know what to do with it." Even Lucy, at this point using far more of her cerebral capacity than anyone else on Earth (28% to be exact), does not know what to do with her newfound knowledge. There is one scientist who is working on this subject, Dr. Norman (Morgan Freeman) and, after reading all 6,734 pages that he's written on the subject, she still feels compelled to get his opinion on what she should do. This is interesting because after reading all of his writing and presumably being able to comprehend far more in the minutes it took her to read all of it than he has in the decades that he has worked on it, she still thinks he may have a better understanding of it than she does. This is ludicrous because the entire plotline of the movie is that she is much smarter and more capable than even the smartest person in the world who only has limited access to their cerebral capacity. Dr. Norman tells her, "So if you're asking me what to do with all this knowledge you're accumulating, I'd say pass it on. Just like any simple cell going through time." The idea of passing the knowledge on is a reference to humanity's purpose of sexual reproduction. This is particularly interesting because it contrasts with the fact that although Lucy is technological and divine, she still has the same purpose as human: to "pass it on". Ironically, without Dr. Norman's advice, Lucy seemingly wouldn't have known what to do with all of her new knowledge. This enforces the same narrative that Leeloo's plot did: the

failure of a woman, no matter how perfectly engineered or intelligent, to have the independence and autonomy in completing her task.

As Lucy gets down to her last few percentages, she says “I'll build a computer and download all my knowledge in it. I’ll find a way for you to have access to it.” After she turns herself into a supercomputer (becoming a “mother” by the passing on of her knowledge to humanity), a tiny USB drive pops out from the computer and is handed to the small group of male scientists standing in the room. In the time that she has built the computer, she has journeyed through the space-time continuum and gotten to understand life from the beginning of time. She travels from the Big Bang to the present moment and yet at the end of the journey, her entire existence is handed to a small group of men who will have to finish her quest to bring the world knowledge. Without a man to tell her what to do, she would have been useless. Without the men to do something with her knowledge (in the form of a USB), her entire journey would have been pointless. The redeeming quality that Lucy appears to have from this fault of uselessness is that she is, at least, powerful. Sadly, this point of redemption is undermined and destroyed when we reconcile it with the fact that she is only powerful because of the technology. She is only useful when she is the supercomputer. As a human woman before her transformation, she was depicted as incapable. So, Lucy passes from dumb animal, briefly to human, and directly to smart technology without passing through a woman phase at all and only being useful in the end through the actions of men.

There is a fine line between being useless without a man and existing for a man’s use. Although Lucy and Leeloo’s characters fall subject to the former and not the latter, Joi (Ana de Armas) from *Blade Runner 2049* is characterized by both notions. Joi is a voice-controlled operating system who can be switched on and off as K (Ryan Gosling) pleases.

She is a hologram who exists solely for K's pleasure. More so, she is useless without K, as she doesn't even have the power to switch herself on. She is supposed to be a man's perfect woman. Joi is able to learn, so she learns about K and is able to cater more to his needs, likes and dislikes. She takes almost no physical space as her operating system exists in a box called an emitter that is smaller than a fist. She never ages, can immediately dress to his pleasure, and she makes no mess. The only thing that she can't do is have sex with K, however she can conveniently merge bodies with female replicant sex workers so that K can still have those needs fulfilled as well.

Joi is literally an objectified woman, a woman made both into and from an object. K owns her, legally. This barely concealed metaphor of woman as object is an element in the rhetoric of Villeneuve's filmmaking. Anneke Smelik, the author of *And the Mirror Cracked: Feminist Cinema and Film Theory*, defines rhetoric as "narrative, character, image, photography, framing, point of view; those cinematic elements which together make up that particular cinematic style or rhetoric of a filmmaker" (Smelik 3).[55] The choice of Joi's character and the narrative that she exists in together help to make up Villeneuve's rhetoric, which helps to convey Villeneuve's meaning to the audience.

Joi's existence is for K and K alone, and yet the audience is made to feel like she has a personality, as if she is a person trapped inside of her technology. One of the only other woman in *Blade Runner 2049* is a replicant named Luv (Sylvia Hoeks), created by Niander Wallace. She is created for his use only, to be his right hand as well as his eyes (as he is blind). She handles anything he commands her to do. Sadly, she too is a slave to her programming. Fiercely loyal to her creator, she kills replicants without hesitation, though it

[55] Smelik, Anneke. *And the Mirror Cracked: Feminist Cinema and Film Theory*. Macmillan Press LTD, 1998.

seems to pain her. With a straight, uncaring face, she watches as Wallace slices open a newborn replicant and guts her, yet a single tear rolls down her face. Her conflicted empathy trapped inside the technology seems to have found a tiny way out, as if she has sprung a leak. She does the same when she kills Joshi (Robin Wright), K's boss at the LAPD. Luv arrives at her office and confronts her about K's whereabouts. When Joshi won't give up any information, Luv brutally stabs her in the gut and then pulls the knife out and sits down at the computer calmly to look for information. Yet an up-close of her face reveals that, like with the newborn replicant, a tear rolls down her cheek. She sees other replicants as family, or at least her community, and so it triggers her suppressed empathy to kill them or see them die.

Luv is portrayed as the antagonist, yet she seems more human than the rest. Her character, though created for a man's use, has more power and autonomy than Joi does. Joi, the "good" girl, does nothing other than exist for K. The viewers identify naturally with the protagonist woman, yet Joi is a lifeless, objectified, one-dimensional character with no autonomy and no real personality other than the one that her algorithms have told her to develop to please K the most.

Meanwhile, the "bad" girl is multifaceted. The audience automatically and inherently dislikes her, as she is the antagonist and as is the cinematographic convention, yet she shows the most humanness in the film. She has the realest struggle and the deepest conflict. Her character is far less objectified and sexualized than Joi or the sex worker replicant. Luv is powerful over an entire species of replicants, aiding the most powerful man in the world, yet powerless to do what she feels is right. She has true loyalty, which is an admirable quality, yet that quality means that she can't stand up for what she feels is right.

Her struggle is intricate and nuanced, like those of humans, yet the audience is made to hate her.

The women technologies in all of these films are only useful when a man makes them so or only exist for a man's pleasure. Though their purposes vary, none are achieved without a male to direct, guide, influence, or command them. One more example of this is the female newborn replicant whose only use is to reproduce, the most stereotypical use for women. When Wallace understands that she is barren, he literally guts her by slashing open her womb and leaving her bleeding to die. She was created for his use, and when she cannot accomplish her purpose, she is discarded of without hesitation and without humanity. Before discarding her, Wallace exploits her still unformed sexuality, kissing her on the lips before leaving her to bleed. It is painful for the viewer to watch, since this being is so obviously innocent, like a newborn baby. Yet, her womanness is nonetheless abused before she dies. Villeneuve's discourse in this scene, the discourse that will linger in the audience's mind, is that woman is inherently sexual. Newborn, unable to speak, and even covered in slime, Wallace does not kill her until she has been used for her carnal attraction. The viewer questions if without the kiss, the interaction, Wallace would have ever even considered her to be alive.

The autonomous, strong woman technology is a character that the viewer longs to see. Watching the woman fail, be used, and die is unsatisfying for at least half the audience. Then, when the woman does have power, it often results in destruction. Whether it be the femme fatale or more widespread destruction, feminine technologies are portrayed as calculating and merciless from the moment they transition from woman to technological woman.

Woman technology's denouement

The first time that technology was represented as woman in a widely seen film was the robot Maria in *Metropolis* (1927), directed by Fritz Lang. One of the first science fiction films, and viewed now as a basis from which science fiction film has evolved, *Metropolis* is set almost 100 years in the future, in the year 2026. The city of Metropolis is run by rich industrialists and the proletariat work underground on the machines that keep the city running. When Fredersen (Alfred Abel), the master of the city, finds out that the workers are going to revolt at the urging of a worker named Maria (Brigitte Helm), he has an inventor named Rotwang (Rudolf Klein-Rogge) change a robot he has created so that it will look like Maria. He plans to use it to create chaos in the underground and take the power away from Maria.

Rotwang captures Maria and then sends the newly-equipped robot Maria to Fredersen. Fredersen and the robot Maria embrace and Freder (Gustav Fröhlich), Fredersen's son who is in love with Maria, sees. As he doesn't know that it isn't the real Maria, he becomes very upset and falls into a hallucinatory state. When Freder returns to reality, he finds the robot Maria preaching to the workers to destroy the machines and the city. The robot Maria does an erotic dance before the male elite. She entrances them until they will destroy and kill for her. In this case, even the woman technology's destruction is sexualized. It's not just inflammatory words, but her body and sexuality that rile the men up so much that they will kill for her.

The sons of several ruling class men fight each other over Maria, causing death throughout the city. She is described as "[the] woman at whose feet all sins are heaped

[…]".[56] As the chaos in the city reaches its maximum, she influences the workers to leave their children in the city and to go to the Heart Machine. The workers destroy it and the city floods. The workers believe that they have just condemned their children to death and burn the robot Maria at the stake where her duplicity is revealed, finally.

The classic femme fatale, the robot Maria uses her charms to seduce men and drive them to murder each other. She causes total uproar in the underground and mass destruction. Though she was created by men, it is the woman technology and her femininity that is portrayed as the cause of murder and chaos in the city. This first representation of woman technology causing destruction has been replicated throughout the ages. Lucy, for example, is at the heart of destruction throughout the film. Within the first few minutes of the film, her boyfriend is shot and dies. The packet of drugs she brings to Mr. Jang are tested by a man who is then immediately shot in the head. As soon as she begins to have some of the drug in her system, she lures in her jailer with promiscuity, and then kills him and five other men playing cards at the table outside. Minutes later, she shoots a taxi driver for not speaking English. She arrives at a hospital and kills the man on the operating table before getting on it herself. In half an hour of the film, over a half dozen men have been killed. She seduces and kills without hesitation and without question, after gaining only slightly more percentage of cerebral capacity than the average human. Lucy is the modern version of the robot Maria and her licentious dance.

Luv, though less sexualized than the other woman technologies, is no less murderous. She is obsessed with fulfilling Wallace's orders and kills with the same certainty that Lucy does. She begins by killing a morgue technician while stealing Rachael's, the

[56] „Und diese Frau, an deren Füsse sich alle Sünden heften..."

replicant child's mother's, remains. She kills several homeless people with a drone and murders Joshi. She eventually leaves K for dead and goes the extra mile to destroy Joi's emitter (the device from which Joi can be projected). She kills Rachael's clone and goes on to try to kill K before dying herself, still trying to please Wallace in her final moments. After stabbing K with a knife, she kisses him, similarly to when Wallace guts and then kisses the newborn replicant. As Luv has explained earlier, replicants can be programmed to be more or less attuned to their master, based on the master's preference. Wallace, with his God-complex of creation, made Luv to idolize him so completely that her loyalty would never sway and so that she would exist purely for his use. For this reason, Luv emulates him in her final moments.

Death is the ending that awaits many of the women technologies in film, which is paradoxical as part of the divine machine is its immunity to death and its immortality. Think Jane Palmer from the 1949 femme fatale film noir crime film *Too Late for Tears* (Byron Haskin), where after killing her husband and another man, she falls to her death from a balcony clutching the money that she killed over. Luv drowns, Joi is crushed, the newborn replicant is gutted and left to bleed to death, robot Maria is burned at the stake, and Lucy's body disappears even if her mind is now omnipresent. Using the woman technology until her presence is no longer useful and then killing her off, or at least getting rid of her physical presence in Lucy's case, is an ever-repeating narrative.

The hypothesis underlying this chapter has been answered; the woman technology is represented in science-fiction film as weak, sexually deviant, useless, and destructive without the powerful technology that contains it. The woman technology neither successfully manages to subvert the female-male power constructs, nor the conventions of women in film that permeate the field. When referring to conventions in film, I am referring

to those of dominant cinema. In doing so, I am simultaneously referring to male-directed cinema, as men make up the vast majority of film directors, writers, and producers.[57]

Despite the possibility that science fiction film possesses to represent women differently than other genres, Lucy, Leeloo, the robot Maria, the newborn replicant, Joi, and Luv all illustrate the traditional way that women are represented in cinema. For a film to be feminist, which none of these are, they must subvert the norms of woman in cinema. To have a feminist character, I argue that the woman must subvert her male-owned presence. The character could also be presented in a way that constructs the viewer as female and allows her to situate herself in a feminist role. Note that there does exist feminist science fiction, both in film and in literature. It has roots as early as 1666 with *The Blazing World*, written by Margaret Cavendish. It usually focuses on futures where people are androgynous, depicted as utopias, or where the differences between males and females are intensified, depicted as dystopias.

Woman technologies' cinematographic codes and conventions align with those of non-technological women. Depicted dumb as an animal and useless, they cause destruction throughout their journey right to the conclusion, where they often fail in their final task without a man's help. This narrative has existed as long as technology represented as women has existed, and has had little improvement throughout time. *Metropolis*, the first time that we see technology represented as woman, makes the character who epitomizes, and becomes the model of, the image of all woman technology in science fiction film to

[57] Refer to footnote 1 in the introduction to see statistics on male/female directors. "WHERE ARE THE WOMEN DIRECTORS ? : Report on gender equality for directors in the European film industry (2006-2013)". European Women's Audiovisual Network. P.p. 22. www.ewawomen.com/uploads/files/MERGED_Press-2016.pdf.

follow. While the world changes around woman technology, as every element of the future does in science fiction (from architecture to biology), their roles stay stagnant in the most important aspects. Their narratives are reinforced on the audience, and a seemingly never-ending cycle of vicious, sexist cultural norms are perpetuated.

Conclusion

"[T]here is the quasi-mechanical ability of cinema to "embalm the real," that is, to preserve, probably better than any other art form, what I would call an archival reality or a documentary reality of history," Antoine de Baecque writes of cinema.[58] The archival reality of history that de Baecque discusses has allowed us to look back into history and view the future from a past perspective, the consequence of which is that we were able to investigate the futuristic images of technology throughout the entire history of science fiction film. With these images, we first derived the distinction between human and technology, where the line is becoming increasingly more obscure as technology develops. Deborah McKnight and George McKnight write, "What exactly should we understand about agents whose bodies continue through time but whose sense of the past is at best unreliable and at worst false?"[59] In *Blade Runner 2049*, the pronounced topics of reproduction and memory are not what let us distinguish between human and technology. Rather, it is the being's ability to have subjective experience that discriminates between the two. Furthermore, we understand that alongside subjective experience, humanity has the ability to reflect upon those experiences and our existence. *Alphaville* and *Blade Runner 2049* give us material on which to make sense of these experiences, but they also give us a space in which to explore how technology and humanity may meld in the future.

To summarize, *Blade Runner 2049* shows that subjective memory is what distinguishes human and technology, it situates us on the side of the replicant, showing us

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[58] Baecque, Antoine de. *Camera Historica: The Century in Cinema*. Edited by Lawrence D Kritzman. Translated by Ninon Vinsonneau and Jonathan Magidoff, Columbia University Press. 2012. Pp. 357.

[59] McKnight, Deborah, George McKnight, Steven M. Sanders. "What Is It to Be Human?". *The Philosophy of Science Fiction Film.* The University Press of Kentucky. 2008. Pp. 35.

the humanlike traits reflected in the replicant. Of the original *Blade Runner*, McKnight and McKnight write: “Where *Blade Runner* initially positions viewers […] with the implicit understanding that […] the replicants are fabricated, nonhuman beings, the film eventually undermines and reverses this understanding so that we come to recognize the replicants as those who embody the values we believe define what it is to be human: empathy, trust, loyalty, love.”[60] *Alphaville* showed the negative influence of technology’s one-dimensional thought and the importance and subjectivity in questioning our surroundings. Of *Alphaville*, Richard Brody wrote, “The use of actual locations and objects to represent the dystopian future reflected Godard's tendentious view of the modern world: he said that *Alphaville* was "really about the present," of which the film's presumptive "future" was really just a projecto ad absurdum of what he saw occurring the world in which he lived."[61] This film is a way to look at the culture of technology in the past and see how it was imagined to be problematic in the future. The films make us uncertain about what happens when technology is able to have subjective experience, as it already is pictured with reproductive capabilities and with emotions. Thus, through the trends of technology throughout cinematic history and now with the modern representation of technology, we conclude that the future of human and technology are concordant and that there will be no veritable way to distinguish between the two.

After deciphering the distinction between human and technology, we continue to interpret the films that represent the human mind as a vessel for technology. *Lucy* and *La Jetée* both have their protagonist time travel with neither a time traveling machine nor a

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[60] McKnight, Deborah, George McKnight, Steven M. Sanders. “What Is It to Be Human?”. *The Philosophy of Science Fiction Film.* The University Press of Kentucky. 2008. Pp. 35.
[61] Brody, Richard. *Everything is Cinema. The Working life of Jean-Luc Godard.* Faber and Faber Limited. 2008. Pp. 227.

wormhole in sight. For the Man in *La Jetée*, it is his fixation upon a face in his memory that allows him to return repeatedly into the past, and eventually venture to the future. For Lucy in *Lucy*, her increased cerebral capacity allows her to gradually gain more and more abilities over space, matter, and time until she is eventually capable of traveling to the Big Bang in her mind, while still sitting in one place. The films show the technological power of the brain which allows the protagonists to travel to past times. We deduce from these past images of futuristic technology that society predicts that our brains will become more technological than they already are and eventually give us capabilities that seem nearly omnipotent.

Omnipotent capabilities evoke the thought of divinity or gods. We found that in early cinematic history, films such as *Metropolis* and *Alphaville* referenced technology with allusions to biblical scenes and figures. In modern cinema, the genre showed technology with omnipotence, such as Lucy in *Lucy*. She has powers that vie with those of a God; she becomes omniscient and can manipulate the space-time continuum. The prospects of a divine future are not only for technology, but for humanity as well. As the differences between technology and humanity become less discernable, the development of the human will be result in a both technological and omnipotent posthuman.

Finally, while several of these technologies were women, and while some were even represented in an omnipotent manner, the power of the woman was subverted by her need for man, by erasure of her body, or by her begetting violence. To reiterate, “Film reveals the problems and preoccupations at the time of their shooting by the places and environments that they choose to describe, by what they say, by what they suggest, or by what they don't

say. They translate, through the messages transmitted, social values and aspirations, thus providing an irreplaceable document."[62]

In the past and in the present, we can see what social values we as society hold dear by looking at what these films show in terms of sexism. As film also shows our aspirations, even more so when science fiction, we use the role of the woman in modern films set in the future to see what society now aspires for women to be. I hoped to see filmmakers breaking the mold, the same way that they do with technology, but instead I found that the woman's narrative stays true to its traditional, sexist depiction. The sexualized and deleterious woman in science fiction, whether technology or human, falls victim to outdated, preconceived notions of what a woman character should do and how she should be embodied. While filmmakers continually advance the portrayal of technology and of mankind, woman's cameo in the genre is lethargic in comparison. This has real-world impacts; science fiction film lacks strong woman leads that little girls can look up to and there is a portion of blame that film should receive for leaving technology fields dangerously short of girls.

The future of technology and humankind are intertwined, according to Francophone science fiction film. Yet, "the more things change, the more they stay the same"; the world of tomorrow will hold onto the biases of today. Whether this is the case because it is a male-dominated industry or because society hasn't changed and therefore film hasn't

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[62] Gaston-Mathé, Catherine. *La Société française au miroir de son cinéma : de la débâcle à la décolonisation.* Panoramiques-Corlet. 1996. Pp. 11.
Les films révèlent les problèmes et les préoccupations de l'époque de leur tournage par les lieux et les milieux qu'ils choisissent de décrire, par ce qu'ils disent, par ce qu'ils suggèrent ou par ce qu'ils taisent. Ils traduisent, par les messages transmis, les valeurs et les aspirations sociales, fournissant ainsi un document irremplaçable. »

changed, we do not know. The maleness of the industry is probably a reflection of society's patriarchy, but it is not clear. Perhaps by looking at science fiction literature, we could discover if a less male-dominated industry has different representations of women in science fiction. However, if that was true, it could also stem from a difference in medium. Cinema has a distinct voyeurism aspect to it that literature does not, which could be a component of the sexism in film.

In the coming years, we will continue to see the way in which humans and technology are portrayed on-screen. Just as the last century has significantly swayed humans and technologies representations in film, the next century is sure to do so as well. As people are becoming more aware of the importance of representation in film, a new period in cinematic history may be on the verge of taking place, which could completely change that way the subjects in this thesis are depicted. As humanity questions its destiny and we wish to see what the future has in store, we are in luck: with each new film is another way to imagine our fate.

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