

## The Modern Robot and the Postmodern Cyborg: The Post-Human as an Image of Anxiety

LEANNA RICHARDSON

We are living in a technological age. In the western world, our daily use of and contact with technology is decidedly unavoidable. In many ways, our gadgets, devices, computers, modems, cords, batteries, phones, and GPS systems are items of functional convenience. But this convenience easily evolves into a dependence, in which the human being feels the significant absence of technology when left without one of these devices. At times this dependence makes us uneasy. While we are happy with the shortcuts and time saved by digital grocery lists or voice-controlled day planners, for example, we are also afraid of our inability to function efficiently without them. This is clearly illustrated by the sheer panic experienced by the owner of a smart phone upon realizing that it has been left at home. Suddenly cut off from the internet, digital maps, and instant messages, a person without her iPhone struggles to answer questions, find recipes, navigate highways, and interact with other people. Her day has become scattered and without clear intention. And suddenly, she has lost the constant sense of connection and interaction created by this small device. Our dependence upon technology goes even deeper than these superficial needs and wants, sometimes claiming responsibility for the very breath in our lungs as a ventilator, or the beating of our hearts as a pacemaker.

In looking backwards at our technological journey, from cavemen to the wielders of pocket-sized super computers, there are turning points and periods of rapid development. In examining these moments we can see that this level of efficiency came with many anxieties. The very idea of efficiency has roots in modernity, when production was revolutionized by the onslaught of advanced machinery and the streamlining of time and space it allowed. Yet, with each new invention that harbors hope for the elimination of an inconvenience comes the potential for complication. In the 1958 French film by Jacques Tati entitled *Mon Oncle*, this potential for complications within the human/machine relationship is illustrated by the character of the uncle, who struggles to adapt to a technologically advancing world. With minimal dialogue, the film relies on loaded imagery to define the conflict between Mr. Hulot and technology. As the machines and gadgets of an advanced modern kitchen baffle Hulot, the viewer is shown the potential for human error in the use of these novel devices and the potential for them to cause more confusion than convenience. Here, the line between human and machine is clearly defined by one man's averseness to mechanical interaction and his desire for simplicity. This demonstrates the challenge associated with the process of human adaptation to mechanical advances and gives an example of the anxieties that surround the advancements of modernity.

As technology rapidly advances, the automated world of our future becomes an inevitable reality, reaching into nearly every realm of our daily lives. As the modern world becomes more dependent on these technologies our anxieties increase, and are made legible through art, literature, and film in the image of the modern robot and the postmodern cyborg. Within the context of modernism, in the 20<sup>th</sup> century, the robot is presented as a figure of technological creation which attempts to replicate the human and calls into question the boundaries between human and machine. Later, with the shift to postmodernism in the late 20<sup>th</sup> and into the 21<sup>st</sup> century, the cyborg emerges as a figure of the robot re-imagined. The postmodern cyborg has an outward body that appears to be that of a human and is emotionally autonomous. Rather than being clearly discernible as a machine, as in the case of the modern robot, the postmodern cyborg reflects a heightened anxiety about the blurring of the difference between man and technology in both literature and film. The machine is able to act as a signifier of the complex dynamics present in the relationship between man and technology and allows for the presentation of a re-defined image of the boundaries between these binaries.

In my thesis, I will identify and discuss the modern robot and the postmodern cyborg in literature and film from the 20<sup>th</sup> and 21<sup>st</sup> centuries. Through an analysis of specific examples of robots and cyborgs in modern and postmodern literature and film I will attempt to delineate the boundaries between man and machine and foreground the anxieties and issues brought forth through the transgression of these boundaries. By looking first at the image of the modern robot as represented in Czech author Karel Capek's play *R.U.R. (Rossum's Universal Robots)* (1920), I will introduce the robot as an image of Taylorist theories. Next, I will illustrate one way in which the robot as the re-invented human falls short through the narrative of reproduction in Aldous Huxley's novel *Brave New World* (1932), in which the laboring body of the robot is crafted and made sterile according to its altered function. Here, the inability to reproduce creates a dependency of the robot on its inventor or creator. By eliminating reproduction, the robot is placed outside of sexuality. In contrast to Huxley's de-sexualized robot, the robot Maria in Fritz Lang's 1927 film *Metropolis* becomes a vamp machine, a gendered robot whose power and powerlessness lie in her sexuality, and who becomes made the object of the male gaze. The second section of my paper will focus on the postmodern cyborg as the technological figure undistinguishable from the human. I will focus on the concept of origin as pertaining to the cyborgs' experience of memory in Ridley Scott's 1982 film *Blade Runner*. Here, the acquisition of memories creates a false sense of familial origin which allows the cyborg to enter an emotional space that was previously exclusive to humans. Donna Haraway's essay "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century" (1985) will help me clarify the question of the 'subjectivity' of the cyborg. Haraway's presentation of the cyborg as a political body brings forth the issues of biopolitics and shared political identities. She depicts the cyborg as a transgressor of boundaries and calls into question the anxieties incited by these transgressions. Finally, in Kazuo Ishiguro's *Never Let Me Go* (2005), with which I will conclude my discussion, Haraway's view of the potential of biopolitics takes a more ominous turn: here the body of the cyborg becomes the sign of the inhuman, as a cloned organism whose organs can be farmed. As the most nearly human of the cyborgs that I analyze, Ishiguro's cyborg figures combine the issues of labor, reproduction, and origin on which I focus throughout my paper. These representations of the robot and the cyborg I study act as figures for the anxieties surrounding the advancement of technology.

**The Modern Robot:** The appearance of the image of modernity coincided with an artistic and scientific interest in the simulation of the human body. Since the beginning of the first industrial revolution, artists and scientists have been attempting to create functioning replicas of people or animals in the form of automatons. For instance, *The Digesting Duck* by Jacques de Vaucanson (1738) was an automaton that simulated the digestive system of a duck. The duck would "eat" grain and then it would appear that it was passing through the body and was released as waste. This mechanical duck was a complicated example of advanced science, and was an awe-inspiring spectacle to its viewers. Though not a copy of the human body, it is an early automaton that is relatively well known in the art world and is an example of this interest in replicating bodily systems.<sup>1</sup> Earlier on, Leonardo da Vinci's designs of automatons from the 15<sup>th</sup> and 16<sup>th</sup> centuries never came to fruition, but were even earlier evidence of this type of thinking and planning, all in an attempt to replicate the human form.

In the 19<sup>th</sup> and 20<sup>th</sup> centuries the appearance of the artificial human into the canon of art and literature can be linked to the technological advances that brought machines such as the automobile or the phonograph to the public. With WWI, war took over and transformed technological progress. From more efficient weapons to the invention and improvement of

---

<sup>1</sup> From an excerpt of *Living Dolls: A Magical History of the Quest for Mechanical Life*, Gaby Wood. <http://www.guardian.co.uk/books/2002/feb/16/extract.gabywood>

prosthetics, people were introduced to a world of mechanical and technological possibilities within a short period of time. Until this time, technology was conceptualized as something that could make mundane or repetitive tasks simpler, or that could make work, communication, or travel more easy or enjoyable. When the tank and the machine gun appeared during WWI suddenly technology became deadly. In a literal sense, technological advancements in weapons and intelligence were killers. Concepts of time were complicated by the disjointed and traumatic nature of the war. This created an innate anxiety that inspired art and literature. One such example is Cubism, a genre of art whose disregard for any realistic conception of time or space illustrates the harried and scattered nature of the war and of the accelerated speed at which technology was advancing.<sup>2</sup>

By challenging the boundaries between human and machine, artists and authors alike were able to present a figure representative of the liminal space between the human and the non-human. For example, Mary Shelley's *Frankenstein* (1818) calls into question the status of inhumanity as imagined through her monster. This creature is neither human nor machine, but rather a being that exists somewhere between the two realms, in an undefined space of human-like emotions and monster-like body. Shelley's exploration of this liminal space spans time, language, and culture by illustrating an anxiety that remains relevant today. The making of a figure that imitates the human form is the central theme to the next section, where I will focus on the modern robot as re-imagination of the human figure and as a laboring body.

**Karel Capek's *R.U.R.*: The Human Figure Re-invented:** The modernist robot as presented in literature and film is a figure of the desire for reinvention. It is essentially a re-creation of the human form, which not only strives to improve the human but also to replicate it. In particular, the robot acts an image of the human laborer re-figured within the realm of labor and production. The robot as a mechanical figure attempts to re-imagine the human body, replicating on a physically representative level yet always unable to truly recreate the human being. In Karel Capek's 1917 play, *Rossum's Universal Robots (R.U.R.)*, we are presented with a mass-produced robot that serves to replace the factory worker in order to free up humanity for intellectual endeavors and development. This play, first written in Capek's native Czech and then translated into English in 1922, was published within the political and social climate of Europe during World War I and presents the robot as a manufactured product of biotechnology for the first time in literature. The robots of *R.U.R.* are modeled after the human, with anatomically correct crafted "bodies" which have been improved and made uniform in order to increase efficiency. Their indifference to death and inability to become bored by monotonous tasks makes them better equipped for assembly-line labor than their human counterparts. Their total absence of emotion is indicative of the existence of the robot as an embodiment of the efficiency of the modern machine.

Capek's non-feeling robots serve their purpose until one particular robot named Radius is given a larger brain and a sense of self-awareness. His new "human" traits manifest themselves in a need for power and a selfishness that destroys the factory system and causes the downfall of the robot race. He refuses to work for the humans and instead declares, "I want to be the master of people" (37). In this moment, Capek illustrates Radius as a literal embodiment of the anxiety of technology. He has been endowed with brainpower capable of evolution, and has thus been made capable of surpassing his human inventors. Once he has crossed this line of autonomy, he can no longer be controlled and wishes to be sent to the "stamping room," where robots go to be terminated. While this seems like it would solve the problem of the robot revolt, the other robots

---

<sup>2</sup> Kern, Stephen, "The Cubist War," *The Culture of Time and Space 1880-1918*. Harvard University Press, Cambridge, Mass. 1983.

have already begun to evolve and revolt and it is too late. Not only is this situation out of control, one human character, who had no part in the invention of the robots, is unable to cope with the thought of terminating Radius because of a deep sympathy that she feels for him. This character, a woman named Helena, is a depiction of the desire to apply human emotions to the machine.

Helena is part of a spectrum of human reaction to the robots presented by Capek, and she represents the mistake of projecting feelings and emotions onto these non-feeling beings. From her first encounters with the robots, Helena is incapable of comprehending that they are devoid of feelings like sadness, self-pity, or pride. She is disturbed by the inventors' treatment of the robots and demands that they be respected, treating them as if they were people just like her. Her attitude towards them and inability to compartmentalize them as inhuman is problematic. When she meets a robot with the appearance of a young woman she refuses to believe that she is meeting a machine, "No, no, you are lying! ...Sulla you are a young woman like me, aren't you? Tell me you are!" (11). It is as if Helena is unable to view Sulla as separate from herself or as outside of her sense of reality. She is unable to look past the fact that Sulla has the exterior of a woman to understand that she has been manufactured by the inventors. Within this apparent psychological block, we can see that part of what causes Helena to fear the robots is their outward appearance. Her anxiety is rooted in that which cannot be seen. One of the inventors realizes this and offers to have Sulla taken to the dissecting room so that she can be cut open and Helena can see her internal body. Helena is horrified at the offer, knowing that Sulla would be discarded afterwards, and refuses to have any part in her "death."

It is in this moment of Helena's conflicted distress over the issue of the robots inability to "die" that their soullessness is brought to the surface. Since they are not really living at all, they are unable to die. The question of a soul is foregrounded as the inventor describes their non-living state to Helena, "So you see, Miss Glory [Helena]. Robots do not cling to life. They can't. They don't have the means—no soul, no pleasures. Grass has more will to live than they do" (12). The inventor is able to accept the robots as machines that exist outside of the constraints of humanity and equates them to an object less alive than grass. Here, he is removing any agency from them and placing them completely within the boundaries of objectivity. He feels that they are safely controlled and therefore pose no threat. Helena has a hard time accepting this, and through her reluctance to understand the possibility of a soulless entity, Capek is navigating a complex theological issue. Helena's unease with the robots is suddenly linked to their rejection of any biblical narrative of origin. As she begins to comprehend them as without a spirit or free will, her pity for them deepens.

Helena is representative of a common attitude towards the robots. Her concerns regarding their well-being are based upon her own assumptions that they think and feel just like humans do. Her position on the spectrum of human reaction to robots in the play is nearing extreme, but she is surpassed in her aversion towards the machines by her housekeeper, Nana. Helena acts as a catalyst for an explanation of the robots' lack of a soul and her disturbance at their lack of a soul alludes to her position as a Christian woman for whom this is problematic, but it is through the character of Nana that Capek truly explores this theme. Nana refuses to interact with the robots and finds them horrific. She is portrayed as an old-fashioned woman whose stubborn religious beliefs prevent her from opening up to the idea of the robots. She is seen first as stuck in her ways and closed off to advancement, but when her predictions about the dark fate of the humans at the hands of the robots begins to come true, the reader gains insight to the play's message about the potential dangers of technological advancement.

Through this narrative of the loss of control over the robots, Capek communicates an anxiety surrounding the potential of the machine to exceed its intended purpose and, in a sense,

the dangers of the masses in revolt. As the boundary between man and machine is tested by Radius, the human characters are sent into a fit of regret and metaphysical crisis, remorsefully denouncing their attempt at “playing God.” It is through this narrative that the reader can better understand the risk associated with creating a machine that so easily transgresses these boundaries. This failure to control technology illustrates the robot as an image of man re-imagined, which fails to replicate humanity exactly but nonetheless falls victim to human vices.

While the robots fall victim to human vices, the general population of humans begins to give in to their own vices as well. It is interesting that Capek turns the focus back onto the humans, as the main interest in the robot narrative tends to center on the potential failures and follies of the robot race. The indirect consequences on the nameless masses are often ignored, but as one of the inventors shares news from the outside world we are given a glimpse of the side effects felt by a society whose labor force is suddenly replaced by robots, “It’s true! It’s true! The whole world, all the lands, all mankind, everything’s become one big beastly orgy! People don’t even stretch out their hands for food anymore; it’s stuffed right in their mouths for them so they don’t even have to get up—Haha yes indeed, Domin’s Robots see to everything!” (35). Out of lack of necessity, the human race has evolved into a helpless, indulgent mass. Their laziness reaches an apocalyptic level when women become infertile as an evolutionary response to the inactivity of both men and women. The doomed population exemplifies the potential dangers of and overly technologic society, foregrounding one aspect of the anxiety of technology. Rather than communicating the dangers of dependence through the robots, Capek reverses the narrative and plays out the consequences for the humans. Not only are the robots susceptible to the ills of humanity, the humans themselves fall to lure of laziness when given the opportunity.

By exhibiting his vulnerability to greed, a hunger for power, and selfishness, the robot evolves into an image closer to man than was originally intended by its inventors. While still not completely human, it is presented as a figure capable of human faults and errors, which complicates the preconceptions of the robot as an entity purely based on efficiency and precision. The parallel narratives of a power-hungry race of robots and a listless, over-indulgent race of humans illustrate the dangers of mechanization on two levels. While the robots cannot sustain themselves without the help of their inventors, the humans cannot function without the robot workforce to which they have grown accustomed. Through their mutual dependencies, both parties are defeated by human vices. In this way, *R.U.R.* acts as part of a transition from the image of the robot as machine separate from humanity to the image of the robot as pushing the boundaries between human and non-human.

**Robots and Reproduction: Fordism and Huxley’s *Brave New World*:** The introduction of the assembly line during the second industrial revolution (which began in the late 19<sup>th</sup> century) changed the imagery of labor, evoking a world in which the human was reduced to a state of repetitive mechanism and in which the machine began to surpass the human in accuracy and efficiency. Automaker Henry Ford utilized the assembly line when he created a factory system in which the laborer worked in tandem with a system of mechanical conveyor belts. With this system, Ford achieved beyond-human efficiency that allowed for rapid mass production. He also paid his workers higher than average wages. By streamlining production he was able to flood the markets with product, and by paying his workers high wages he was able to ensure that there would be plenty of buyers. His theories, often referred to as “Fordism,” were given attention when he saw a huge success with the Ford Model T. Many authors and critics attributed Fordism to Taylorism, which preceded Ford’s assembly line. Often the two theories were seen grouped together despite some fundamental differences. Notably, Fordism requires that the worker adapt

to keep pace with the assembly line, while Taylorism calls for the adaptation of machines and practices to the skill and ability of the worker<sup>3</sup>.

Prior to Ford's success, Frederick Winslow Taylor revolutionized the labor sphere with the introduction of his ideas on efficiency in the workplace in an essay called "The Principles of Scientific Management" (1911).<sup>4</sup> Taylor describes his essay as a call to train the worker in order to eliminate the waste of resources that he identifies as an issue of national concern, "...our duty, as well as our opportunity, lies in systematically cooperating to train and to make this competent man, instead of hunting for a man whom someone else has trained, that we shall be on the road to national efficiency" (6). He goes on to detail the ways in which this training and hyper-efficiency can be achieved by finding the most efficient way of performing a given task and establishing that as protocol. By removing the freedom of choice of creative problem solving, Taylor creates a uniformity of labor that allows for a heightened level of productivity and attempts to eliminate some element of human error through training.

Taylor's focus is on the efficiency of labor in the workplace; however, he writes that his theories can be applied to other areas of life, including social and personal practices: "the best management is a true science, resting upon clearly defined laws, rules, and principle as a foundation...the fundamental principles of scientific management are applicable to all kinds of human activities, from our simplest individual acts to the work of our great corporations, which call for the most elaborate cooperation" (7). Here it is apparent that while labor is the focus of his essay, there is much more at stake than the efficiency of the worker. Taylor is proposing a revolutionary scientification of all aspects of American life. His theories foreground a shift in thinking that caused changes to social consciousness as well as labor practices. Peter Wollen describes the effects of Taylorism and Fordism in his essay, "Cinema/Americanism/the Robot" (1989), which details the literary and cinematic consequences of the mechanization of labor and the direction in which this will lead the future of the American worker and his perception of reality. "Fordism," writes Wollen, "turned the factory into a kind of super machine in its own right, with both human and mechanical parts" (43). This blending of man and machine led to what he describes as "a new model of social organization, with universal implications" (43).

We are made aware of the potential outcomes of this new "social organization" in Aldous Huxley's dystopian novel *Brave New World*, (1932). Huxley illustrates the human *as* a robot. He does not present an automaton but instead a human body that has been altered rather than replicated in order to increase productivity and ensure efficiency in Fordist society. One such alteration is visible in the process of reproduction, reduced to a laboratory process in which ova are extracted from a viable female donor (there are a limited number of fertile females). The ova are then fertilized and incubated in a process that involves intervention at various steps in order to alter or retard the fetus so that it may be fit for a certain type of labor. The betas might be exposed to alcohol while the alphas are allowed to develop to full term, for example. Thus the role of the mother has been removed and replaced by technology and scientific knowledge. Huxley presents this alternative as a glaring example of what the family might look like in a machine-centric society, and highlights the act of reproduction as one denoting factor that divides the human and the robot.

---

<sup>3</sup> Daniel A Wren, Ronald G. Greenwood. "Business Leaders: A Historical Sketch of Henry Ford," *The Journal of Leadership Studies*, Vol. 5, No. 3, 1998.

<http://jlo.sagepub.com.proxy.library.ucsb.edu:2048/content/5/3/72.full.pdf+html>

<sup>4</sup> "The Principles of Scientific Management", Frederick Winslow Taylor, 1911.

<http://books.google.com/books?id=HoJMAAAAYAAJ&pg=PA3#v=onepage&q&f=false>

In looking first at the robot as infertile, it can be argued that the absence of “parents” in a maternal and paternal sense causes the robot to exist entirely outside of any origin. The robot lacks a mother and is therefore set apart from any image of the family. Any sense of filiation is removed and any narrative of creation or origination becomes obsolete. Wollen argues that, for Huxley, the mother can be read as the threatening presence of all that is transgressive. This reading centers upon the idea that the monogamous family disrupts productivity, because the passions and emotions it generates are “beyond the control of the system” (47). The robot is presented as a being that is not devoid of sexuality but as a creature for whom any element of procreation or reproduction has been removed from the discourse of sexuality in order to maintain complete control and authority over the laboring body. The elimination of reproduction places the robot outside of the social constructs of gender and removes any value placed on reproductive capabilities. It also alters the purpose of sexuality and moves it from a safe place of procreation into a dangerous territory where sexuality exists solely for pleasure.

This difference between robot and human, denoted by an inability to reproduce, causes the robot to be totally dependent on the inventor or creator for the continuation of their kind. In her essay, “Technophilia: Technology, Representation, and the Feminine” Mary Ann Doane describes the displacement of anxiety of technology onto the female robot figure or the idea of the feminine. She identifies the body as a finite and limited entity and sites the cinematic re-imagining of the body in the genre of science fiction as a result of technological advance. For Doane, the relationship between creator and robot is one in which “the maternal and the mechanical/synthetic coexist in a relationship that is a curious imbrication of dependence and antagonism” (166). The placement of anxiety on the female figure is present in the narrative of the lack of a mother for the modern robot. As a creation of their inventor, the robot can be conceptualized as the product of “womb-envy” (167), in which the male inventor fulfills a desire for maternal reproduction through the creation of this sterile woman machine. The creation of the robot begins and ends with its inventor, with any potential for descendants depending solely on further invention, “Reproduction is that which is, at least initially, unthinkable in the face of the woman-machine. Herself the product of a desire to reproduce, she blocks the very possibility of a future through her sterility” (166). It is through this figure of the sterile woman machine that Huxley’s robots represent the complicated relationship of dependence and antagonism between machine and maker. Huxley presents an interesting solution to this problem in that he does not portray the inventor as a single character but rather depicts a process in which his robots are produced by other robots. By mechanizing the process of reproduction as a function of the robots, Huxley presents the robot as at once the inventor and the invented. Without an inventor, the figure of absolute power is instead represented through Ford. Worshipped as a godlike figure, Ford’s theories are bound in a book entitled *My Life and Work* that is read and distributed like a Bible. Ford is a new image of the mad scientist of previous robot narratives. His role in the creation of the robot race exists on a theoretical level. The society is his brainchild, perfected to the point of being self-sustaining.

Huxley’s robots are without a traditional mother and are “born” of a complicated biotechnological process over which they have no real control. The family unit is rendered completely obsolete by a structure of schooling and care dictated by carefully engineered plans and practices. In this way, reproduction is sacrificed for the purpose of greater efficiency and increased production. Huxley presents the image of a potential motherless society that embodies the anxiety of technological advancement as projected onto the body of the woman machine. Since the anxiety about technology is often rooted in a fear of losing control of the machines that men create, this hyper-controlled process of reproduction can be read as an act of the ultimate control that is so desired. But this extreme control over reproduction results in a loss of individuality, halted progress, and complacency. Huxley communicates these side effects through

other aspects of this Fordist society, such as the categorization of groups of individuals based on ability for a career, or the introduction of “feelies” as a form of recreation and entertainment that lulls the population into a contented mass with no desire for social change.

As reproduction becomes mechanized and controlled, the individuality present in the “naturally” born child raised as an individual in a unique family setting is eliminated. While this elimination adds to production and efficiency, Huxley presents the apocalyptic outcome of this scenario as a caution to the potentials of an overly mechanized world. The introduction of a character called the Savage serves to underline the problems of a system that has eliminated individuality and autonomy. The Savage was born of a mother and an unknown father, which fundamentally opposes the established structure of society and of sexuality. He is emotional and uncontrolled and serves as a contradiction to all that is Fordist. By introducing this type of sexuality to the society, the Savage shakes the foundation of approved relationships: short-term dating relationships in which sex was purely pleasurable and had no emotional or physical repercussions. The Savage feels passionate love, something foreign to the robots. It is his status as the only character born of a mother that sets him apart as a symbol of danger. Again, the mother is presented as a figure of danger and the embodiment of the familial structure that poses such a threat to the structure and control of the society. This projection of anxiety onto the female presents the tension between man and machine. Reproduction outside of the controls of the laboratory has resulted in the creation of this troublemaker, and at the root of this misdeed is sexuality out of control. While the Savage is the villainous figure, it is his mother that is blamed as the source catastrophic recklessness. She has acted on sexual desire or impulse and the consequences of her stepping outside of the boundaries of this rigid society shatter the social constructs surrounding reproduction, sexuality, and the family unit. In the next section, I will describe another narrative of sexuality out of control. The female robot presented as a vamp machine in Fritz Lang’s *Metropolis* is an embodiment of the fear of the powerful and uncontrollable woman. The anxiety of technology is communicated through this narrative of loss of control of the female machine.

**The Sexualized Robot in Fritz Lang’s *Metropolis*:** The sexualized robot introduces a new perspective about the dominance of the machine and the presence of a power structure in the man-technology dichotomy. The robot as a sexual entity is threatening. In the same manner in which women have been conceptualized as innocent or non-desiring, all discourse of impulse or instinct for pleasure has been removed from the modernist robot. However, the technological robot and the female meet in the image of sexuality through the figure of the Robot Maria in Fritz Lang’s 1927 film *Metropolis*. Austrian director Lang adapted the film from the screenplay that he and his wife Thea Von-Harbou, a Prussian artist, actress, and author, wrote together. The film depicts an industrial capitalist German society in which a mass of factory workers inhabit the bowels of the city, toiling the days away in order to operate a large machine represented by a Moloch figure until the true Maria intervenes and invokes an uprising. Robot Maria, the invention of a jealous scientist, foils the uprising through the use of powers based in her sexuality. Robot Maria marks the emergence of the modernist robot re-imagined as a vamp. She is robot on the inside, yet with an outer-body created from and in the image of the body of the true Maria via a complicated technological process involving the transfer of energies and the conferring of organic materials in a truly powerful scene communicating the amalgamation of human and robot.

In this way, Robot Maria represents the joining of woman and machine, in an illustration of what Janet Lungstrom<sup>5</sup> refers to as “technosexuality” (128). Lungstrom discusses the role of the female as a machine in modernist literature and film and describes the ways in which her

---

<sup>5</sup> In her essay, “Metropolis and the Technosexual Woman of German Modernity” (1997).



sexuality has been constructed through this narrative, “In the industrial era of Western modernity as well as in our own cybernetically postmodern times, the effect of technology has been to cast woman in a provocative pose, a position not unlike that of a woman in the male imagination: she is the sex-machine locus of her creators’ fear and fascination” (128). In this way, we can read Robot Maria as the vamp created not only by her inventor but re-created through the sexual gaze of her male audience. As an image of “fear and fascination,” Robot Maria is both villainized and idolized, a woman whose sexual prowess is simultaneously enjoyed and scorned. As she dances provocatively onstage, the audience of men in the scene is captivated and pleased, reaffirming her status as a sexual being. In some ways this can be seen as empowering, but I would argue contrarily that this endowment of power is a means of the demonization of the Robot Maria and essentially strips her of the real powers of control, agency, and independence. It is through this power, which she is granted by the sexual gaze of the male, that she is set apart from the image of purity and goodness that is the true Maria. Unlike her mechanical counterpart, the true Maria is granted power through her purity and female innocence and is thus freed of the restrictive bonds of this sexualization. In examining these contrasting representations we can see that, in its simplest form, the film presents the true Maria as an image of maternal goodness, while the Robot Maria serves as an image of the unnatural and impure. The anxiety surrounding the robot and her unclear status as human or machine is projected through the narrative of a sexual obsession with the appearance of the female body.

The robot of modernism allows for woman to occupy the space of man/machine yet requires that the male remain strictly inside or outside of the binary separation. Robot Maria is the result of the placement of the human within the machine, and thus embodies the social site of female and robot, allowing the viewer to conceptualize the similarities between the two social constructs yet still communicating the ire of the vamp through the narrative of the destructive machine. Lungstrum describes this as the shortcomings of both woman and robot, “No matter how much programming goes on, woman and machine refuse to be man’s perfect creations” (130).

As an imperfect creation who is at once powerful and uncontrollable, Robot Maria is ultimately burned at the stake, which illustrates her as a symbol of the fears of both women and technology. Andreas Huyssen<sup>6</sup> describes the representation of the Robot Maria as a vamp as a means to communicate the anxieties surrounding what he calls “technology-out-of-control” through Lang’s representation of the threatening sexuality of the female machine. He describes the woman, nature, and the machine as sharing a quality of “otherness” which can be interpreted as a result of their threat to male authority and control, “This view of the vamp’s sexuality posing a threat to male rule and control, which is inscribed in the film, corresponds precisely to the notion of technology running out-of-control and unleashing its destructive potential on humanity. After all, the vamp of the film is a technological artifact upon which a specifically male view of destructive female sexuality has been projected” (74). The rhetoric of power and dominance blankets the film’s powerful imagery, illustrating the projection of destructive sexuality that Huyssen describes. Robot Maria exists in the imagined gaze of the male. As she is burned at the stake we are shown that she is both created and destroyed at the hand of man, a dialogue that functions on two levels to demonstrate the power of man over women and the power of man over machine. This demonstration of power points to the anxieties surrounding the robot and the threat it presents to the human through its re-imagination of the body.

**Gender in *Metropolis*: Male Dominance and the Woman Machine:** Male power is clearly visible when Rotwang assembles Robot Maria in two phases, thus deconstructing the female body

---

<sup>6</sup> In his essay “The Vamp and the Machine,” (1986).

and demonstrating his domination over both the interior and exterior physical body of the woman machine. He first constructs a metallic inner-body. In this phase it is very obvious that Rotwang has created an automaton. Wires, lights, metal, and electricity compose the human-shaped figure. The metal shell of the robot subtly denotes gender with the inclusion of a decidedly female chest and abdomen, but is not explicitly female. It is only after the application of the true Maria's outer body that the robot takes on the flesh and face of a person. By splitting the construction of the robot into two phases, Lang foregrounds the fact that Rotwang has truly crafted this robot and thus has controlled the entire creation: "It is male vision which puts together and disassembles woman's body, thus denying woman her identity and making her into an object of projection and manipulation" (75). That is to say that the woman robot is removed from subjectivity by means of her very creation by the male vision. As she is made in the gaze of man, both her inner and outer body are made belonging to him, and thus her individuality is nonexistent. She is an object of the manipulation of her inventor and of the projection of male anxieties.

To complete the cycle of assembly and disassembly described by Huyssen, the Robot Maria falls apart in two phases as she is burned at the stake. First she loses the outer body of the image of the true Maria and is returned to the metallic inner-body that was created during the first phase of her construction. This illustrates that the Robot Maria is truly a machine, and brings the viewer back to the image of her creation. With the image of the inner machine we are reminded that this is a piece of technology that has gone awry. As the mechanical body melts away we are given the image of complete destruction, in which man has ultimately undone its own creation. Lang has led the viewer in a full circle, allowing man to create and destroy the woman machine and thus exhibiting his power over both woman and machine.

Rotwang's vamp machine is clearly robotic and the construction and deconstruction of her mechanical body denotes this visually. By placing Robot Maria clearly in the category of machine, Lang is able to foreground the Robot Maria's status as a figure of technology and thus communicates her as a robot of modernism and a figure of the anxiety of technology. In the next section, I will explore a figure that cannot be easily identified outwardly as a machine or robot, the postmodern cyborg. I will analyze the cyborg as an evolution of the robot figure and as an image of technological anxieties regarding origin, subjectivity, and the physical body.

**Memory and the Postmodern Cyborg: Replicants With and Without Origin:** As a postmodern image, the cyborg serves to refigure the dichotomous relationship between human and machine through a new conceptualization of the physical and psychological limits of technology. Where the robot was easily identified as a machine and admittedly mechanical, the cyborg further blurs the boundaries between human and non-human. In Ridley Scott's 1982 film *Blade Runner*, the figure of the cyborg is aptly named "Replicant," denoting a complete lack of distinguishing physical characteristics that might set him/her apart from the human. They are genetically engineered for specific tasks on other planets by a huge corporation called Tyrell Corporation. These manufactured beings are created piece by piece in laboratory settings, as illustrated in a scene in which Rick Deckard (Harrison Ford) enters the lab where eyeballs are farmed, a process that involves freezing temperatures and an obsessive, doting scientist who watches over each of his eyeball creations with a paternalistic attention to detail.

To focus briefly on the process of creating a Replicant, it should be noted that it is through a mixture of advanced biological and technological science, art, and manufacturing that these human-like cyborgs come into being. Rather than guiding the viewer through each painstaking step of the process, Scott offers only brief glimpses. One such glimpse, as mentioned above, is the making of the eyeballs. Through an impressively chaotic organization of wires, gels, computers, and lights, all in a freezing refrigerator room, we are shown the complex and

subversively revolutionary manner in which the creation takes place. In contrast to the mechanical production of the Robot Maria of *Metropolis*, whose mechanical interior is covered by a human exterior through a process that can only be explained by magic or electrification, the Replicants are created through science and technology alone. It can be inferred from the glimpse of the laboratory that there is nothing “magical” about these cyborgs and that they are the product of advanced biotechnological engineering. This is important in that it sets the cyborg apart from its robotic predecessors. It also illustrates the amount of design and engineering that went into their creation and adds to our understanding of them as real and possible beings.

The Replicants surpass humans in physical capability and are generally larger and stronger as most have been manufactured for the purpose of colonizing other planets, a difficult, dangerous, and physically demanding task. They are engineered to be workers in both a physical and mental sense. One female Replicant, Pris (Daryl Hannah), has been manufactured for the alternative purpose of sexual recreation. She is made to be beautiful and with a more playful, childlike disposition than her counterparts. Roy (Rutger Hauer), another Replicant has been manufactured as a soldier, his mental and physical strength finely tuned for the purposes of combat and covert operations. It is within this programming of disposition and of personality that the film successfully pushes the boundaries of the human and nonhuman.

The film presents a small group of the Replicants that have escaped from their ship and fled to Earth, where they are searching for their inventor in order to get answers about their existence and lifespan. Deckard is a Blade Runner, a type of police officer or detective whose job is to find and kill any Replicants on Earth. His task centers on his ability to identify Replicants, which is impossible to do by looking at them. One way that they are identified is through what is called a “Voight-Kampff” test, which utilizes a machine that zooms in on the subject’s pupil while they are asked a series of questions. The machine allows the test administrator to gauge any involuntary changes in pupil size or dilation that would denote empathy. Any signs of empathy would show that the test subject is a human. While the Replicants accurately imitate humans in nearly every way, they are incapable of the emotional complexity that would allow them to feel remorse or empathy. The issue of their emotional complexity is of interest and concern to their inventor, Tyrell, who has developed an advanced type of Replicant in an attempt to overcome this hurdle.

The advanced group of Replicants has been given memories, a condition that sets them apart from the robots of modernity. To have memories creates a false sense of origin and allows the cyborg to occupy a human space based upon familial experience, nostalgia, and an imagined future. Tyrell and his team of genetic engineers are aware of the risks involved with the endowment of these complex memories. They fear that the Replicant will evolve emotions on their own, so they limit the Replicants to a four-year lifespan as a safeguard. Clearly the engineers are fearful of the potential of their own inventions, and see their capability for autonomous evolution as a threat. Still, they implant the Replicants with memories as an experimental attempt at a more accurate copy of the human, their slogan being “More human than a human.”

The result of their being given memories is a sense of origin that complicates the cyborg experience. By providing memories, the creator of these cyborgs has removed them from the place of innocence normally occupied by these artificial beings, a status described by Donna Haraway in her essay “A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century” (1985), as a being outside of the Freudian family romance, “In a sense, the cyborg has no origin story in the Western Sense... [the cyborg is] an ultimate self untied at last from all dependency, a man in space” (150-151). The cyborg is threatening because it is unlike the human on a fundamental level. Without parents or a family, the cyborg exists outside

of the concepts of origin and procreation that form the basis of human identity. Haraway describes this as both an advantage and a disadvantage, in that the cyborg is free from the limitations of familial constructs, yet they are also inherently outsiders. Their position as beyond the natural order sets them apart.

Yet the Replicants are cyborgs with a false sense of origin, whose false familial memories cause them to be unlike the robots that preceded them and to be more humanlike. Haraway acknowledges that where there previously existed a boundary based on exclusion from the narrative of origin, there is now a boundary transgressed, “Late twentieth-century machines have made thoroughly ambiguous the difference between natural and (art)ificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines” (152). The ambiguity between natural and artificial that Haraway describes is made apparent through the story of Rachel, a Replicant who does not even know that she is a Replicant until Deckard tells her. Rachel has been implanted with memories of a childhood that she believes to be her own, and when Deckard questions it she presents a photograph of herself at age six with her mother as proof that she is human. The Replicants have been given these photos as evidence of a falsified past, and each of them clings to their personal photos as a symbolic link to their origin. Deckard proves to Rachel that she is a Replicant by reciting to her some of her own personal memories. He would have no way of knowing these things except that Tyrell has revealed them to him. Upon learning this Rachel drops the photo and rushes away, symbolically abandoning her past as she discards the photograph that has acted as her anchor.

The photograph is a product of technology, just as Rachel is a product of technological advancement. While the camera is a far simpler machine, the parallels cannot be ignored. The imagery of her attachment to this photograph can be read as an important visual representation of Rachel’s inhumanity. As a cyborg whose past has been falsely implanted in her brain, Rachel is a figure of the ambiguous distinction between human and machine described by Haraway as a central element of the cyborg narrative. Her memories and the past that they form are an ambiguous collection of images, both tangible and intangible, that represent the uncertainty surrounding her existence. Deckard was unable to identify Rachel as a Replicant until she failed the Voight-Kampff empathy test, which evokes an anxiety of the unknown. And this anxiety is intensified by the fact that Rachel could not identify herself as a Replicant until her own memories were revealed as false. In this unawareness of self the cyborg is seen as a figure of the potential for technology that has evolved autonomously beyond the control of the human but also beyond the control of itself.

As a manifestation of these anxieties, the Replicant offers the viewer an image of technogenesis, in which human and machine have evolved in conjunction. This concept of technogenesis, as Bruce Braun and Sarah Whatmore explain,<sup>7</sup> can be understood as the process by which objects of technology are integrated into our lives, and the conceptualization of these objects as a part *of* our society rather than *in* our society: “It is a mistake to posit humanity as somehow separate from and existing prior to the world of things; rather... the human comes into being with this world” (xviii). As pertaining to the cyborg narrative, this can be understood as describing the issues of objectivity and subjectivity of the cyborg as an item of technology. While we often think of ourselves as separate from our items of technology, that is in fact not the case. Technological stuffs are at once “material,” “meaningful,” and “eventful,” ( xxi). The word eventful when used in this sense implies an element of agency or effectiveness that places the item or object into the realm of subjectivity. In this way, the cyborg can be read as a subjective

---

<sup>7</sup> Bruce Braun and Sarah J. Whatmore, “The Stuff of Politics: An Introduction” (2010).

object of technological advancement. Within the context of technogenesis, the cyborg can be understood as a means of questioning the boundaries between subject and object and of challenging the boundaries between man and machine.

**Haraway and the Cyborg as Subject/Object:** The absence of any differentiating factor makes the cyborg more threatening to the human, in that it more closely emulates the reality of human existence and possesses an emotional depth previously unmatched in film or literature. Scott's Replicants represent the nonhuman figure in a way that disrupts the binary opposition of real/simulated and calls into question our own conceptions of what defines the human subject. Haraway argues that in many ways we can envision the cyborg narrative as a response to the dualisms through which we have defined the state of being human and our relationships with technology. These social and physical boundaries are the constructs by which we explain our actions and positions, the roles we deem appropriate and the limits of our own humanity. Through these boundaries, we define that which is neither human nor subject, but rather inhabits a liminal space that skirts these boundaries.

Haraway argues that by placing ourselves in this binary of subject/object we leave room for the categorization of the minority, woman, or the animal as secondary and as object. The cyborg acts as a disruption to the binary. It is a being that is not wholly human, yet who was created by humans and exhibits innately human qualities as well as physical indicators that allow us to conceptualize their humanity while still grasping at their monstrosity as a means of anchoring them outside of the space of being human. Here, in this space that lies just outside of human, we find a cyborg who disrupts boundaries and complicates binaries in such a way that allows for the conceptualization of an entirely different category. The cyborg is an outsider embodiment of a newly conceptualized subject, creating space for a female, a minority, or an animal to exist outside of objectivity as a subject redefined.

This redefinition of the subject allows for the categorization of the "other" along the lines of certain overlapping commonalities, creating an identity based on shared intersections rather than one based on oppositions. This creates space for political and social partnerships that might have previously been out of reach according to the outdated binaries, as she describes, "So my cyborg myth is about transgressed boundaries, potent fusion, and dangerous possibilities which progressive people might explore as on part of needed political work" (154). Haraway presents the cyborg as an illustration of the impossibility of separating subject from object. As the cyborg body becomes a melding of human and machine so fully integrated that it is nearly impossible to separate the two, the human anxiety over this loss of clearly defined space is realized. No longer able to call the machined body the object, the cyborg represents a transformation into the simultaneous role of subject and object. I will discuss the presence of this duality in Japanese-born British author Kazuo Ishiguro's fictional novel entitled *Never Let Me Go* (2005), in which the cyborg body is illustrated as a race of clones. Physically human, these cyborgs differ not in their bodies but in the intended use of their body parts. They are crafted for the use of their organs, a reality that sets them apart from their human counterparts and defines them as cyborgs.

**Kazuo Ishiguro's *Never Let Me Go*: Biopolitics and the Cyborg Body Deconstructed:** The intersections of ethics and biopolitics are foregrounded in Kazuo Ishiguro's novel, *Never Let Me Go*, (2005). Ishiguro presents a race of cloned humans, whose existence and purpose are surrounded by mysterious secrecy all throughout their carefully controlled childhoods, until they reach maturity and are needed as organ donors. In reading these characters as cyborgs, it can be seen that the issues of birth and origin serve to define them as outside of a natural state of humanity. They have been created from humans but have not been born, and share the cyborgian trait of lacking any familial origin. The image of the cyborg created here serves to further blur the

boundaries between human and machine, arguably pushing it closer to a place of unrecognizable similarities.

In order to define Ishiguro's cloned characters as cyborgs, it is necessary to understand them in terms of the human figure re-imagined as a socially constructed body. No longer presented with the robot as a worker, the reader is instead presented with a non-human body reduced to parts. As part of this medical and social experiment, the cyborgs are given what is deemed by their creators to be a fulfilling and inspiring childhood in which artistic abilities are a measure of success and value. This is perhaps thought to compensate them for the painful and morbid fate that awaits them. The narrator is a cyborg who will become a Carer, a nurse assigned to care for the donors, before being called to begin donating her own organs. As she describes her early childhood spent in a secluded community of her cloned peers at their school's campus, she evokes a sense of happiness and contentment that is only periodically overshadowed by an instinct that something is horribly wrong. The peaceful ease and innocence of her childhood is part of a conditioning process set to mold these cyborgs into beings that will eventually be capable of accepting their fate when it is revealed to them. This psychological conditioning differs from other cyborg narratives but is in essence an extended part of the manufacturing process.

In contrast to their robotic predecessors, this cyborg does not embody the mechanical functionality of a robot nor serve as a link or piece of a greater mechanical function, such as a monotonous step in the assembly line of a factory. Instead of being a part of a whole, Ishiguro's cyborg is literally reduced to parts, sourced for organs until the cyborg body can no longer survive and then used for all that can be salvaged. The cyborgs are essentially only needed on a physical level, yet they are physical, mental, emotional bodies that encompass all levels of human existence. It is within this excess, this element of their existence that goes beyond their intended purpose, that these cyborgs become complicated. As a vessel of organs that will later be harvested for transplant, Ishiguro's cyborgs do not necessarily need to be complex, complete humans. Yet they are given these traits that bring them to a position on the spectrum of cyborgs that is arguably as nearly human as possible. Acting as a complete body and mind, they will essentially be dismantled and used as parts of a whole.

Through this narrative, the image of the cyborg has come full circle. By straddling this divide between real and manufactured, the cyborg body is incorporated into the human body. Here we are presented with the cyborg body in its most humanlike form. With this heightened sense of replication a greater anxiety is communicated. Not only does this cyborg replicate the human on a literal biological level, it also possesses emotional complexity, thus justifying the heavily guided childhood during which they are afforded many intellectual luxuries that many people are not. Since they will not become the generation of people to propel society, they are spared from certain lessons and elements of education that are basically unnecessary because of their limited lifespan. Rather than acting as a part of system, the cyborg now embodies the system physically. Within each cyborg exists the physical body system necessary to sustain the life of an unknown human recipient of donation. The cyborg then is a system in itself.

Ishiguro utilizes his image of the cyborg to raise ethical and philosophical questions in regards to the boundaries between human and machine. As the cyborgs' organs are harvested they are reduced piece by piece until their physical body can no longer survive being taken apart. Ishiguro does not describe the humans to which these organs are transplanted, yet they are present as an unnamed character. It is within this deliberate exclusion that the reader is forced to wonder at what point do these humans become defined as cyborgs? As cyborg parts replace their human body parts, their bodies become less wholly human. But at what point would this redefinition

occur? It is within this unanswered question that anxiety of technology can be found. *Never Let Me Go* offers a narrative example of the hybridization of human and machine, a process that ultimately defies physical and social boundaries. Through the creation of this confusion and the blurring of these physical boundaries, the image of the cyborg acts as a representation of the re-imagination of cultural, social, and physical binaries.

One such redefinition of social boundaries is seen in the cyborgs' desire to identify the human from whom they were cloned. The narrator describes the tendency of the cyborgs to look for any resemblance to themselves in magazines, photos, and in strangers' faces. They often do this in a secretive manner, not admitting to each other that that is what draws them to certain magazines or images. The cyborgs know enough to assume that they were cloned from paid human volunteers, and for this reason they assume that the volunteers must have been downtrodden members of society for whom the monetary motivation would have been tempting. The cyborgs feel the need to identify the person from whom they came, and seek to develop this part of their identity that is lacking a clear origin. Here, we can see that despite never having seen or met their human counterparts, the cyborgs feel an innate desire to connect with the source of themselves. This biological connection defies the norm by hinting at a desire for a relationship resembling a parent/child bond that does not actually exist. The cyborg desires a connection and a person with which to identify, yet that anonymous human has had no hand in bringing about their existence aside from the donation of DNA.

A desire for connection also underlies the storyline of the cyborgs' attachment to material things. As children, the cyborgs participate in fairs where they are able to purchase goods from the outside world. This is an exciting privilege and is one of the only opportunities that they have to acquire items of personal use or importance. While some purchases are practical in nature, others are based purely on want and demonstrate the cyborgs' desire to build their "collections." The narrator explains that these collections come to represent the individuality and identity of the resident, and that the items collected will most likely be kept for the rest of their lives because of sentimental value. Their desire to collect is evidence of their autonomy. The cyborg has shifted from a creation of scientific or technologic invention to an evolving individual with personal tastes and desires. The cyborg identity as an intangible internal existence is presented as a desire for companionship and attachment through both the search for items of personal value and the search for the human from whom they were cloned. Through this narrative of wanting and searching, Ishiguro illustrates the shifted boundary of the social space occupied by the cyborg.

**Conclusion:** When looking at the modern robot and the postmodern cyborg, it is important to focus on the narrative of the physical body of the robot or cyborg figure. Within this image the anxieties of technology are embodied and engaged. However, much can be gained from looking also at the human side of the story. The human presence, whether named or unnamed, can illustrate anxieties of the consequences of a society wrought with technology. As technology begins to alter or replace instinctual actions, such as reproduction, an important aspect of human life may become obsolete. Technology subtracts from humanity by simplifying or altering interactions like communication, travel, food consumption, and education. As humans adapt to these changes, some skills or abilities may be lost. The overall ease of live may lull the masses into a state of complacent lethargy or blind acceptance, stripping society of all potential for change and improvement. The replacement of basic human functions could alter our bodies and our minds, and were our dependencies disrupted by the loss of control of technology, we would be helpless.

From these anxieties stem the images of the modern robot and the postmodern cyborg that I have discussed in this thesis. As illustrated in Aldous Huxley's *A Brave New World* and

Karel Capek's *R.U.R.*, reproductive capability is a subject in which the anxiety of technology is channeled. The desire and need to reproduce are so central to the propagation of people into further generations of thinkers and creators, and both authors present an image of the possible disappearance of this ability. By exploring this possibility, Huxley and Capek present the anxiety of technology through the figures of an altered race of robots. Despite the importance placed on reproduction in robot and cyborg narratives, the sexualized robot body is often presented as a source of uneasiness, such as in Fritz Lang's *Metropolis*. Here, the robotic female body is presented as a symbol of both sexuality and technology unrestrained. Desperate to control the vamp machine, the only answer is for her creators (her male audience) to disassemble her as she is burnt at the stake. And just as this power is exercised over her body, Kazuo Ishiguro presents a cyborg whose body is under the complete control of its creators, down to its last organ. Ishiguro's cyborgs are essentially dismantled into parts, thus returning the cyborg body in a cyclical manner to the status of the robot, a sum of parts that attempts to replicate the human being yet fails to do so.

It is made clear through the narrative of technology out of control that is present in each of these images of the modern robot and the postmodern cyborg that the anxiety of technology is rooted in a fear of losing control. This is expressed through scenes of rebellion as the robots or cyborgs evolve beyond their original intelligence or emotional depth and attempt to gain power, through the organization of a workers' revolt, or through the physical body evolved beyond its intended purpose. These narratives assign an identity to an abstract fear: the fear of technology out of control. The modern robot and the postmodern cyborg are figurations of the imagined consequences of the interdependent relationship between man and machine that dominates our current world. That which is feared is not only the loss of control of technology, but also the loss of humanity.



## Works Cited

- Blade Runner*. Dir. Ridley Scott. Perf. Harrison Ford, Rutger Hauer, and Sean Young. Warner Bros., 1982.
- Braun, Bruce, and Sarah J. Whatmore. "The Stuff of Politics: An Introduction." *Political Matter: Technoscience, Democracy, and Public Life*. Minneapolis: University of Minnesota, 2010. ix-xxxv.
- Capek, Karel, *R.U.R. (Rossum's Universal Robots)*. London; New York: Penguin Books, 2004.
- Doane, Mary Ann. "Technophilia: Technology, Representation, and the Feminine." 1990.
- Haraway, Donna Jeanne. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." 1985.
- Haraway, Donna Jeanne. *When Species Meet*. Minneapolis: University of Minnesota Press, 2008.
- Huxley, Aldous, *Brave New World*. New York: Harper Perennial, 1989, c1932.
- Huyssen, Andreas. "The Vamp and the Machine." *After the Great Divide: Modernism, Mass Culture, Postmodernism*. Bloomington: Indiana UP, 1986.
- Ishiguro, Kazuo, *Never Let Me Go*. New York: Alfred A. Knopf, 2005.
- Kern, Stephen. "The Cubist War." *The Culture of Time and Space 1880-1918*. Cambridge, Mass.: Harvard University Press, 1983.
- Latour, Bruno. *We Have Never Been Modern*. Cambridge, Mass.: Harvard University Press, 1993.
- Lungstrum, Janet. "Metropolis and the Technosexual Woman of German Modernity." *Women in the Metropolis: Gender and Modernity in Weimar Culture*. Ed. Katharina Von Ankum. Berkeley, Los Angeles, London: University of California, 1997. 128-44.
- Metropolis*. Dir. Fritz Lang. Perf. Brigitte Helm, Alfred Abel, and Gustav Frohlich. 1927.
- Mon Oncle*. Dir. Jacques Tati. Perf. Jean-Pierre Zola, Adrienne Servantie, and Lucien Frégis. 1958.
- Shelley, Mary. *Frankenstein or The Modern Prometheus*. 1818.
- Taylor, Frederick Winslow. "The Principles of Scientific Management." 1911.
- Wollen, Peter, and Patrick Brantlinger. "Cinema/Americanism/the Robot." *Modernity and Mass Culture*. Ed. James Naremore. Bloomington: Indiana UP, 1991. 42-69.
- Wood, Gaby. "Living Dolls: A Magical History of the Quest for Mechanical Life." Web. <<http://www.guardian.co.uk/books/2002/feb/16/extract.gabywood>>.

Wren, Daniel A., and Ronald G. Greenwood. "Business Leaders: A Historical Sketch of Henry Ford." *The Journal of Leadership Studies* 5.3 (1998). *SAGE Journals*. Web. 18 May 2012.