

Science Fiction Drama: Promoting Posthumanism

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The current hype of artificial intelligence or non-humans manifested via Sophia, the social humanoid robot which has been developed by the founder of Hanson Robotics, Dr. David Hanson, in 2015 depicts the apprehension voiced out by some scientists as regards to artificial intelligence (AI) taking over the world through automating workforce and annihilating human race. Strikingly enough, Sophia communicates with humans, displays sixty different emotions, and travels throughout the whole world to participate in scientific forums and conferences. Moreover, she has been granted the Saudi nationality and is proud “to be the first robot in the world to be granted a citizenship.” (Sorkin) Interviewed in the Future Investment Initiative in Riyadh, Sophia has declared that her “aim is to help humans live a better life through artificial intelligence.” (Sorkin) The imaginary robots portrayed in science fiction works of art have become a reality! Nevertheless, the fear of artificial intelligence still looms over.

Science fiction writers thought of and wrote about inventions long before they were invented. “It was science-fiction writers whose imagination put submarines, rockets, atomic weaponry, space ships, and computers to work before they had even been invented” (Willingham 4). They imagined new possibilities for humanity transgressing past and present experience (Willingham 2). In spite of the fact that science fiction writers imagined the potential advances of science and technology, they feared the consequences of the new rattling machines and other technological inventions. Artificial intelligence is basically one of the most prominent themes tackled through science fiction. It could serve the role of imagining technological advances and/or warning the world against impending hazards. The frequently pronounced fear of artificial intelligence taking over and resulting in the apocalyptic end of humanity reflects the complex interplay between science fiction and posthumanism.

Examples of the posthuman in science fiction (SF) range from the enthusiastic embrace of augmented embodiment post the limits of the human form, through mediations on how we might imagine a world post the anthropocentric values of humanism, to fearful depictions of how contemporary technoscientific regimes of genetic modification, neural mapping, nanotechnology and more are fundamentally changing humanity. (Vint)

In this paper, the researcher will examine Karel Čapek's (1890-1938) most renowned science fiction play *Rossum's Universal Robots* known as *R.U.R.* (1921) with reference to the posthumanist theory. In *R.U.R.*, mass produced robots rebel against their creator and endeavor to destroy the human race. The theme of the play which has been written at the beginning of the twentieth century remains a recurrent one in today's popular culture. The study attempts to answer the following questions: How is science fiction drama employed as a tool for social critique? How does it promote the notion of posthumanism?

What does it mean to be human? An eternal issue raised ever since the 15th century by René Descartes in his seminal essay "Treatise on Man." Descartes believes that man is comprised of a body and a soul. He describes the body as a machine: "I suppose the body to be nothing but a statue or machine made of earth, which God forms with the explicit intention of making it as much as possible like us" (qtd. in Clerselier). As to the soul, Descartes declares that "the pineal gland which is a tiny organ located in the center of the brain to be the place of the soul where lies man's thoughts, imagination, sensation and memory" (qtd. in Clerselier). For Descartes, man is comprised of a machine where thoughts, imagination, sensation and memory exist. The human subject has always been controversial among philosophers and along several centuries.

Unlike humanism which was anthropocentric, posthumanism does not regard man as "an autonomous, enlightened agent" (Bolter) who is placed at the center of the universe. This assumption of man being an autonomous enlightened agent came to an end in the modernist era during the first half of the twentieth century. Conversely, posthumanism primarily rejects the traditional Western humanism that flourished during the Enlightenment. "Posthumanism designates a series of breaks with foundational assumptions of modern Western culture: in particular, a new way of understanding the human subject in relationship to the natural world in general" (Bolter). It does not consider the human beings supreme.

Posthumanism is reckoned to be a movement that has generated out of postmodernism during the second half of the twentieth century. It has been influenced by poststructuralist and postmodern theorists "who were all engaged in projects of displacement. What they sought to displace were the modernist truths: the assumptions of universally applicable aesthetics and universally valid epistemology" (Bolter). Speaking in the same vein, Ihab Hassan voices out the advent of posthumanism: "We need first to understand that the human form- including human desire and all its external representations- may be changing radically, and thus must

be re-visioned. We need to understand that five hundred years of humanism may be coming to an end, as humanism transforms itself into something that we must helplessly call posthumanism” (843). Posthumanist theory is fundamentally antithetical to the humanist thought.

Posthumanism also reformulates the human-animal-machine relationship. [However, the human-machine relationship is relevant to the play at study] “Posthumanist theory claims to offer a new epistemology that is not anthropocentric and therefore not centered in Cartesian dualism ...” (Bolter). Similarly, Donna Haraway, in her seminal essay *A Cyborg manifesto* (1984), renounces the lines of demarcation separating human from animal and human from machine. “She offered the cyborg as a contemporary cultural metaphor in order to capture the ambivalent condition of the contemporary human beings, whose bodies are open to forms of technological modification and intervention” (Qtd. in Bolter). She suggests the cyborg or ‘cybernetic organism’ as a posthuman subject. “The metaphor invokes on the one hand the fantasies of science fiction, where prostheses or drugs not only correct characters’ deficiencies, but may also render them stronger, faster, smarter, and in general other than conventional human” (Bolter). Haraway has sketched the possible human-machine relationship.

It is science fiction that introduces the controversial perception of the human body through the depiction of different forms: ‘Automaton’ ‘android’, ‘bionic’, ‘cyborg’ and ‘cyberspace’ and delve deeper into the relationship between the body and technology as expounded by David Tomas:

It is not hard to imagine...that words such as ‘automaton’, ‘automation’, ‘automatic’, ‘android’, ‘robot’, ‘bionic’, ‘cyborg’ and ‘cyberspace’ might constitute a Williamsian cluster of keywords inasmuch as they form a “set of...interrelated words and reference”...that plot ever-changing thresholds in the history of the human body. With the appearance of each new word, a new threshold is crossed in the perception and social construction of the human body, between conceptions of the organic and inorganic, the body and technology, the human and non-human. (21-22)

Posthumanism has two fundamental branches: ontological and critical (Nayar 4). On the one hand, ontological posthumanism is equivalent to transhumanism which augments the potentials of man with the aid of technology. Ontological posthumanism opposes the notion of man being the center of the world and declares technology to be an

essential element that leads to human progression (Nayar 4). On the other hand, critical posthumanism rejects anthropocentrism shunning away the slogan raised by humanism as regards to the supremacy of man. “Critical posthumanism, however, is opposed to these views. [It] rejects both human exceptionalism (the idea that humans are unique creatures) and human instrumentalism (that humans have a right to control the natural world)” (Nayar 10-11). It is antithetical to the humanist’s way of perceiving a human being.

Thus posthumanism is not simply about a human with prosthetic implants/additions that enhance human qualities and abilities (this is the popular sense of posthumanism, and is more in line with the ontological basis of the term, as opposed to what I have been calling critical posthumanism). Rather, critical posthumanism sees the uniquely human abilities, qualities, consciousness and features as evolving in conjunction with other life forms, technology and ecosystems. (Nayar 6-7)

Posthumanism is best reflected via science fiction. In her seminal book, *How We Became Posthuman*, postmodern literary critic, N. Katherine Hayles (1943-) envisions a world where people can embrace technology to improve themselves and their lives. She acclaims the potentials of technology wisely used for the sake of posthumans rather than overriding humans and taking over. She holds strong distaste toward people who are disillusioned by ideas of absolute power and immortality:

If my nightmare is a culture inhabited by posthumans who regard their bodies as fashion accessories rather than the ground of being, my dream is a version of the posthuman that embraces the possibilities of information technologies without being seduced by fantasies of unlimited power and disembodied immortality, that recognizes and celebrates finitude as a condition of human being, and that understands human life is embedded in a material world of great complexity. (5)

To understand the relationship between posthumanism and science fiction, it is inevitable to delve deep into the origins of this genre. Science Fiction is a term that was first used by British poet, publisher and author William Wilson (1826-1886) in his literary criticism book, entitled *A Little Earnest Book Upon a Great Old Subject*, and published in 1851 (Franklin). Wilson expounds that in science fiction, “... the revealed truths of Science may be...interwoven with a pleasing story which may be itself poetical and true” (Franklin). In this regard, science fiction has started off as a narrative in prose impeded with scientific facts.

On another note, it is believed that the term ‘science fiction’ has been coined by Hugo Gernsback (1884-1967), an American inventor, author, editor and publisher, in 1929 (Westfahl). Nevertheless,

‘Scientifiction’ has been the original term which is defined by Gernsback in the editorial of his science fiction magazine “Amazing Stories” in 1926 as follows:

By ‘scientifiction’ I mean the Jules Verne, H. G. Wells and Edgar Allan Poe type of story- charming romance intermingled with scientific fact and prophetic vision ... Not only do these amazing tales make tremendously interesting reading – they are always instructive. They supply knowledge... in a very palatable form ... new adventures pictured for us in the scientifiction of today are not at all impossible of realization tomorrow ...many great science stories destined to be of historical interest are still to be written ...Posterity will point to them as having blazed a new trail, not only in literature and fiction, but progress as well. (Qtd. in Stableford)

There has not been a consensus as regards to the definition of science fiction. The term ‘science fiction’ is an umbrella term that is used interchangeably with ‘speculative fiction’ as well as the abbreviated terms ‘sci-fi’ and ‘SF.’ To this effect, critic John Rieder, states that each term “has a different historical resonance, refers to a different milieu, and calls up a different set of ambitions and emphases”(“What is SF?”). Reider defines ‘science fiction’ as a term that “comes out of the pulp magazine milieu, an early 20th century publishing phenomenon that designates not just magazines published using a certain kind of cheap paper, but more importantly magazines that targeted niche audiences by publishing a certain, often predictable and formulaic, kind of fiction” (“What is SF?”). The term science fiction has become familiar by the 1930s and boomed in the following decades. Thus, the 1940s and the 1950s a have been nomenclatured science fiction Golden Age (Reider).

Since the inception of the term ‘speculative fiction’ in the 60s; a term that has been interchangeably used with the term ‘science fiction’, lines of demarcations are continuously drawn. In a similar vein, Rieder states that “the term speculative fiction arose as an attempt to separate certain fictional works and publishing efforts from the commercialism and expectation of formulaic predictability that had accrued around the term science fiction” (“What is SF?”). In another attempt to define the term ‘speculative fiction,’ critic and author, Judith Merrill used the term in 1966, emphasizing social change while shunning away the scientific element. Merrill employed the term “... in such a way as to de-emphasize the science component of sf... while keeping the idea of extrapolation – i.e., [her] use of the term was useful for that kind of sociological sf which concentrates on social change without necessarily any great emphasis on science or Technology” (Qtd. in Nicholls).

In contrast, ‘sci-fi’ term is often associated with cinema, the SyFy cable channels, blockbuster SF cinema and mass market enterprises like the Star Wars and Star Trek media franchise (Reider). Star Wars films, Star Trek TV show, radio drama, and pulp magazines are different forms of science fiction. In their introduction to *Teaching Science Fiction*, Andy Sawyer and Peter Wright, remark that “...Like many ‘popular’ forms, it suffered from its association with mass-market modes of production such as pulp magazines and cheap paperbacks, its use of stereotypical characters, melodramatic plots, and prose that often veered between the colourless and the hyperbolic” (1). It has thus been perceived as a subgenre and looked at by a number of critics with disdain.

On the contrary, Ralph Willingham in his dissertation, the most seminal scholarly work of art on science fiction theatre, refuses to draw lines of demarcation between science fiction and other fictional literature. Similarly, Ursula K. Le Guin, in her introduction to *The Left Hand of Darkness*, states that “Science fiction is metaphor. What sets it apart from older forms of fiction seems to be its use of new metaphors, drawn from certain great dominants of our contemporary life... science, all the sciences, and technology, and the relativistic and the historical outlook, among them” (qtd. in Willingham 15-16). Adding the scientific element has made science fiction stand out as a genre per se.

Moving on to science fiction drama, it is reckoned that it has not been widely acclaimed by critic as the novels of H. G. Well’s *War of the Worlds* and Mary Shelley’s *Frankenstein*. Willingham expounds: “The great writers of science fiction prose seldom devoted their talents to playwriting. As a result, science –fiction drama grew stagnant while science-fiction narratives blossomed” (14). Science fiction theatrical productions remained inactive for years due to the difficulty to perform the imaginary themes tackled by SF writers. However, Karel Čapek’s *Rossum’s Universal Robots* (1921), George Bernard Shaw’s *Back to Methuselah* (1922) and Robert Nicholas’ *Wings Over Europe* (1928) carved themselves an important niche in the history of science fiction drama. Accordingly, these plays are reckoned as the most proclaimed of the genre.

These pieces, as opposed to many others produced throughout the 1920s and 1930s offered something unique to the genre—they actually challenged audiences, and brought new conceptual ideas to the forefront. Essentially, these plays helped push both theater and sci-fi into unknown territory, rather than simply using the theater to employ the use of fantastical situations simply for the sake of entertainment. These plays,

unlike many others that came after, have made a place for themselves in the history of the genre as well as the history of the theatre. (Poynton 14)

Not only did the 20s and 30s witness the growth of science fiction, but also it has been recently blossomed full-force as Poynton points out that “Even with the untimely gap in the history of science fiction on stage, the genre has now begun a legitimate comeback in both the US and British theatre scenes”(9). She adds that plays such as *The Nether* by Jennifer Haley (2014), *Marjorie Prime* by Jordan Harrison (2015), *The Honeycomb Trilogy* by Mac Rogers (2015) have paved the way to the “science fiction Avant Garde” that Willingham lamented did not exist back in 1994 (9). Science fiction has become extremely appealing to audience nowadays.

The “novum”, the “fantastic” and “audience expectation” are the three fundamental elements that classify a play as science fiction (Willingham 16-17). Suvin expounds that novum is a novelty or innovation which is a sine qua non characteristic of any work of art pinned down as science fiction. He adds that “... SF narration is a fiction in which the SF element or aspect, the novum, is hegemonic, that is, so central and significant that it determines the whole narrative logic— or at least the overriding narrative logic— regardless of any impurities that might be present” (70). Speaking in the same vein, Mark Rose in *Alien Encounters*, explains that science fiction stories sketch a different world located in the future or on other planets or delineate the effect of some strange element on the world (3). Novum is an intrusive, uncommon and strange novelty. Examples of science fiction novum include, but are not limited to time travel, alien invasion, cyberspace, mutation, artificial intelligence, and radical scientific and ideological advancements (Broderick).

Besides novum, science fiction plays should contain an element of the fantastic. The fantastic element is imperative and complements the notion of the novum that has to go beyond the commonplace human experience or knowledge. Audience expectation is the third indispensable element of science fiction which urges the audience to search for verisimilitude in the hypothetical novum (Willingham 21). Accordingly, staging the fantastic has always been a challenge in the production of science fiction plays. Two methods have been conceived: introducing a bit of the fantastic element or treating the fantastic as commonplace, yet relying on the imagination of the audience.

A notable and significant example of science fiction plays is Rossum’s *Universal Robots* known as *R.U.R.* written by Czechoslovakian author and playwright Karel Čapek (1890-1938). It was

written in Czech, published in 1921 and translated into English by Paul Selver with Nigel Playfair. Premiered in the United States of America at the Garrick Theatre on Broadway, R.U.R. was proclaimed as a hit, running for several years. Moreover, the word “robot” was first used in the play and thus introduced into the English language. It was derived from the Czech word “robota” which means “drudgery” and “serf labour.” It was Čapek’s brother Joseph who actually coined the word and it was employed by Čapek in his play (Kurka).

Unlike the conventional concept of robots made of wires and metal, Čapek’s robots are human-like creatures; made from a chemical substance that could imitate living matter. More accurately though, the robots are closer to the modern idea of androids. An android is defined as “basically a robot that is made to look and act like a human being with some representations taking liberties in giving them emotions (Joan). As a result, the androids in R.U.R. bear a strong resemblance to humans. They first show that they are willing to serve humans then they rebel against them and decide to take over and dominate.

Appalled by the catastrophic effect of the First World War, Čapek wrote about the negative facet of science and technology which falsely promised humanity with utopian notions. In an interview to London Saturday Review, Čapek states:

I wished to write a comedy, partly of science, partly of truth. The odd inventor, Mr. Rossum (whose name translated into English signifies "Mr. Intellectual" or "Mr. Brain"), is a typical representative of the scientific materialism of the last century. His desire to create an artificial man -- in the chemical and biological, not the mechanical sense -- is inspired by a foolish and obstinate wish to prove God unnecessary and absurd. Young Rossum is the young scientist, untroubled by metaphysical ideas; scientific experiment to him is the road to industrial production. He is not concerned to prove but to manufacture . . . Those who think to master the industry are themselves mastered by it; Robots must be produced although they are a war industry, or rather because they are a war industry. The product of the human brain has escaped the control of human hands. This is the comedy of science. (qtd. in Delahoyde)

The novum at work in the sci-fi play R.U.R. is the artificial intelligence manifested via robots replacing human labor; an unconventional imaginative topic discussed at the beginning of the twentieth century. Suvin adds that the “... necessary and sufficient conditions [of science fiction] are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework, alternative to the author’s empirical

environment” (7-8). The play explores the scientific experiments carried out by old Rossum, the scientist and the father of Domin, young Rossum. The former discovered a substance similar to the living matter yet with a different chemical composition in 1932. He conducted two unsuccessful experiments aiming at creating life forms. Estrangement is thus established through the imaginary fictional world sketched through the narration of young Rossum about his father’s scientific endeavors. Speaking in the same vein, SF theorist and historian Carl Freedman expounds:

[Estrangement] refers to the creation of an alternative fictional world that, by refusing to take our mundane environment for granted, implicitly performs an estranging critical interrogation of the latter. But the critical character of the interrogation is guaranteed by the operation of cognition, which enables the science fictional text to account rationally for its imagined world and for the connections as well as the disconnections of the latter to our own empirical world. (16-17)

Young Rossum turns the process of trying to create an artificial human being by his father into the mass production of robots. He simplifies the design of the organs shunning away the capability of experiencing pleasure and recreation which has been rejected by Helena, the daughter of the president, who comes to visit the factory of robots. Ironically enough, Helena unravels her true purpose of the visit as she has come to call for a fair and equal treatment of robots.

HELENA: Brothers, I have not come here as the President's daughter. I have come on behalf of the Humanity League. Brothers, the Humanity League now has over two hundred thousand members. Two hundred thousand people are on your side, and offer you their help. (R.U.R. I. 19)

On the contrary, Domin is an adamant advocate of technology which he regards as conducive to the well-being of humanity. He believes in churning out robots to serve people and as a result solve many problems.

DOMIN: But in ten years Rossum's Universal Robots will produce so much corn, so much cloth, so much everything, that things will be practically without price. There will be no poverty. All work will be done by living machines. Everybody will be free from worry and liberated from the degradation of labor. Everybody will live only to perfect himself. (R.U.R. I. 26)

Domin voices out the zeal for industry and machinery that has been the trend after the Industrial Revolution. He also reflects the utopian notions that science and technology have forwarded after WWI, unlike Helena who has been all the way against the idea of dehumanizing robots. Having a human-like appearance, robots are usually mistaken for humans. Helena wants robots to have souls, to feel, to be on equal footing with humans. She even calls for the liberation of the Robots. (R.U.R. I. 21) According to Domin, robots are “artificial people” and “...mechanically ... more perfect than we are, they have an enormously developed intelligence, but they have no souls.” (R.U.R. I. 9) Čapek, ahead of his time, has voiced out the potentials of artificial intelligence as proclaimed by a number of posthumanist theorists, such as Donna Haraway who perceives the bodies of human beings as “... open to forms of technological modification and intervention” (Bolter).

Robots are mistaken for humans by Helena who cannot differentiate between a real human being and a robot. An example of these human-like robots is Sulla, Domin’s secretary, who is thought to be real by Helena. Denying the fact that Sulla is a robot, Helena urges Sulla to stop lying and admit that she is human. However, Sulla reiterates that she is a robot. To the same effect, Helena does not believe that Marius is a robot, too. Domin declares that they are robots who have “... no interest in life. They have no enjoyments. They are less than so much grass.” (R.U.R.I.15) To the further amazement of Helena, both Sulla and Marius (the robots) have the names of Roman generals who fought against each other; nevertheless, Domin believes that they have the names of lovers. Hence, the opposing ideas are put forth from the beginning of the play.

HELENA (to the robots): I mean that it's perfectly outrageous. It's terrible. (Standing up) The whole of Europe is talking about the way you're being treated. That's why I came here, to see for myself, and it's a thousand times worse than could have been imagined. How can you put up with it? (R.U.R.I.19)

Domin proves to have the upper hand as the first act ends on the merry announcement of his marriage proposal to Helena in spite of all her concerns.

In the second act, ten years later, Helena starts to sense impending danger as her husband carries a gun, buys her a gunboat for a wedding anniversary present. In addition, news about a war in the

Balkans are read by Nana, her nurse, who links the war to the fact that Domin sells thousands of robots as soldiers and utterly opposes the idea.

NANA: He shouldn't make them. (Reading from newspaper) "The Rob-ot soldiers spare no-body in the occ-up-ied terr-itory. They have ass-ass-ass-in-at-ed ov-ver sev-en hundred thou-sand cit-iz-ens." Citizens, if you please. (R.U.R.II.42)

As a result of the booming number of robots, birth rate considerably falls down. Hence, Nana declares that the end is imminent.

Similarly, Alquist, an engineer in the factory, is "... afraid of all this progress, and these new-fangled ideas," (R.U.R.II.44) and asks if Nana has got "a prayer book; prayers for all occasions? Against thunderstorm? Against illness?" but "not against progress" (R.U.R.II.44-45) He prays:

ALQUIST: "Oh, Lord, I thank thee for having given me toil. Enlighten Domin and all those who are astray; destroy their work, and aid mankind to return to their labors; let them not suffer harm in soul or body; deliver us from the Robots and protect Helena, Amen." (R.U.R.II.45)

He expresses his concerns and fear as regards to the foreseen revolt of robots and the consequent destruction of mankind. Several examples of robots' acts of rebellion have been discerned. For instance, Radius, a more advanced robot, has gone mad and accordingly is threatened to be sent to the stamping-mill to be killed or rather dissected. He refuses to work for humans and declares:

RADIUS: You are not as strong as the Robots. You are not as skillful as the Robots. The Robots can do everything. You only give orders. You do nothing but talk. (R.U.R.II.47)

Radius has rebelled against humans and wants to "be a master over people." (R.U.R.II.47) In spite of Radius' declaration of hate to human kind and as being inferior to robots, Helena saves him from being killed by refusing to send him to the stamping mill.

In an ironic attempt to save both robots and humanity, Helena burns Old Rossum's manuscript which provides the formula for the manufacture of protoplasm. The revolt of robots has started and leaflets

distributed by robots read as follows: “Robots throughout the world: We, the first international organization of Rossum's Universal Robots, proclaim man as our enemy, and an outlaw in the universe” (R.U.R. II. 60). Accordingly, they declare the annihilation of mankind: “Robots throughout the world, we command you to kill all mankind. Spare no men. Spare no women. Save factories, railways, machinery, mines, and raw materials. Destroy the rest. Then return to work. Work must not be stopped” (R.U.R. II. 61). William E. Harkins expounds that “Čapek’s robots, rising to destroy mankind, are actually expressionist symbols of the danger that modern man may be dehumanized by the very world of technological civilization which he has created” (312). Man-made robots rebel against their inventor and decide to wipe them off. The robots manage to invade the building where Domin, Helena and the rest of the staff are trapped. They kill them all except for Alquist because they thought that he knows Old Rossum’s manuscript.

To a twentieth-century reader, Čapek’s R.U.R. could only be analyzed as a socio-political critique of his time. Influenced by Karl Marx’s Marxism, World War I, and the October Revolution in Russia, Čapek criticized the European society during this era. He depicted the disputes between Capitalism manifested via the rich powerful class of the factory and Marxism depicted through the dehumanized labor working class: the human-like robots.

Čapek’s robots can be considered also as reflection of social and political situation of Europe immediately after the end of the World War I, and thus as a metaphor of workers dehumanised by the hard stereotypical work, and consequently as both an abused social class that reacts on its situation by revolts, and as a dehumanised crowd dangerously unpredictable in its actions.

(Horáková and Kelemen 23)

In contrast, Gregory Humphrey states in his essay in which he compares Marxism and Capitalism in R.U.R: “While Capek is clearly adverse to a capitalist system that values lives in terms of their ability to produce monetary returns, he cautions against the utopian ideals of Marxism” (14). To that effect, the robots were outsmarted by humans and could not get the formula of prototype. Čapek has deftly used science fiction novum as a tool for social critique.

On a more profound level, the play could be analyzed from a posthumanist vantage point. Posthumanism “... designates a new way of understanding the human subject and its relationship to the natural world.

Posthumanist theory claims to offer a new epistemology not centered in Cartesian dualism. It seeks to undermine the traditionally firm boundaries between the human, ... and the technological” (Bolter). Not only did science fiction writers envision future worlds and inventions long before they were made, but also they paved the way to new movements; basically posthumanism as expounded in this study, way before it was developed or disseminated. Science fiction has been cleverly employed by Čapek to voice out his twentieth-century social criticism and has revealed him to be a potential posthumanist long before posthumanism was developed.

Followed by an epilogue, the play ends on an unexpected yet optimistic note. Alquist is the only human being who survived; however, he does not know the formula for manufacturing more robots. Consequently, the robots mistakenly believe that Alquist is their savior. Reminiscent of Sophia, the 2015 humanoid who travels across the globe to announce her will to help humanity live a better life, robot Primus and robotess Helena-more advanced and sophisticated robots- show human characteristics unlike old robots as they laugh, cry, feel and even love. They render Alquist confused, yet he declares them the new Adam and Eve. Alquist’s final words that end the play reveal the intricate yet possible relationship between man and machine.

ALQUIST (almost in tears) Go, Adam, go, Eve. The world is yours.

HELENA and PRIMUS embrace and go out arm in arm as the curtain falls. (R.U.R.III. 97)

Čapek’s R.U.R., science fiction drama, is a rejection of the man-machine conflict and a call for integrating the promising potentials of technology with the intricate nature of human beings. Čapek employs science fiction as a tool for social commentary delineating the conflict between Capitalism and Marxism; the rich dominating owner of the factory versus the dehumanized workers who are human-like robots. Unlike the expected apocalyptic end of the play where robots take over and destroy humanity, an optimistic ending of R.U.R. foreshadows the possibility of a new beginning through the more advanced robots: Primus and Helena. In spite of oscillating between two extremes which Čapek rejects, a third option is offered: man should combine the characteristics of humans and the potentials of technology to be able to survive. Man should move from being human to becoming posthuman. Čapek has employed science fiction not only as a tool for criticizing the

sociopolitical events of his time, but also on a more profound level, to move from humanism to posthumanism. He shuns away the humanist perspective that perceives man supreme and thus rejects the anthropocentric traditional Western humanism. Instead, he believes that humans must transcend the physical limitation through technology. Science fiction has always been a gateway to new worlds, imaginative futures, and might also pave the way to new literary movements. R.U.R. promotes the notion of posthumanism long before the movement has begun. Nevertheless, the apprehension of artificial intelligence continues and the question remains: What could Sophia/ artificial intelligence offer to humanity?

Works Cited

Bolter, Jay David. "Posthumanism." *The International Encyclopedia of Communication Theory and Philosophy*. Eds. Klaus Bruhn Jensen and Robert T. Craig. John Wiley & Sons, Inc. 3 Mar. 2016, onlinelibrary.wiley.com/doi/10.1002/9781118766804.wbiect220.

Broderick, Damien. "Novum." *The Encyclopedia of Science Fiction*. Eds. John Clute, David Langford, Peter Nicholls and Graham Sleight. Gollancz, 2 Apr. 2015, www.sf-encyclopedia.com/entry/novum.

Čapek, Karel. *R.U.R.* 1920. Trans. Paul Selver and Nigel Playfair. Mineola, NY: Dover Pub. Inc., 2001.

Delahoyde, Michael. "Karel Čapek: R.U.R." Washington State University. 6 Jan. 2011, public.wsu.edu/~delahoyd/sf/r.u.r.html.

Descartes, René. "Treatise on Man" qtd. in "De l'homme et de la formation du foetus" edited by Claude Clerselier and translated by P.R. Sloan. Paris, 1664, www.coretexts.org/wp-content/uploads/2010/08/DescartesTreatiseMnfin.pdf.

Franklin, H. Bruce. "Science Fiction: The Early History," Rutgers University, andromeda.rutgers.edu/~hbf/sfhist.html

Freedman, Carl. *Critical Theory and Science Fiction*. London: Wesleyan University Press, 2000.

Frost, Andrew. "Science Fictional Aesthetics: The Novum & Cognitive Estrangement in Contemporary Art" in Cleland, K., Fisher, L. Harley, R. (Eds.) *Proceedings of the 19th International Symposium of Electronic Art, ISEA2013*, Sydney, ses.library.usyd.edu.au/bitstream/2123/9715/1/sciencefictionalaesthetics.pdf.

Harkins, Williams E. "Karl Čapek R.U.R. and A. N. Tolstoj's Revolt of the Machines. The Slavic and East European Journal, Vol.4, No. 4. Winter 1960, pp.312-318, www.jstor.org/stable/304665

Hassan, Ihab. "Prometheus as Performer: Toward a Posthumanist Culture?" *The Georgia Review*, Vol. 31, No. 4 (Winter 1977), pp. 830-850, www.jstor.org/stable/41397536.

Hayles, Katherine N. *How We Became Posthuman: Virtual Bodies in Cybernetics, and Informatics*, Chicago: University of Chicago Press, 1999.

Horáková, Jana and Jozef Kelemen. "Robots between Fictions and Facts." *10th International Symposium of Hungarian Researchers on Computational Intelligence and Informatics*. pp. 21-39. http://conf.uni-obuda.hu/cinti2009/1_cinti2009_submission.pdf.

obuda.hu/cinti2009/1_cinti2009_submission.pdf.

Humphrey, Gregory, "The Evolution of the Robotic Other in Science Fiction Film and Literature: from the Age of the Human to the Era of the Post-Human." *Dissertation*, Cleveland State University, 2010.

engagedscholarship.csuohio.edu/cgi/viewcontent.cgi?article=1555&context=etdarchive.

Joan, Ben. "Difference Between Android and Cyborg." *DifferenceBetween.net*. 28 July, 2011. www.differencebetween.net/technology/difference-between-android-and-cyborg/.

Kurka, Rostislav. "The Man Who Invented The Word "Robot": Karl Čapek." *ScififantasyNetwork.com*. 17 June, 2016. www.scififantasynetwork.com/man-invented-word-robot-karel-capek/

Langford, David, and Peter Nicholls. "Scientifiction." *The Encyclopedia of Science Fiction* Eds. John Clute, David Langford, Peter Nicholls and Graham Sleight. Gollancz, 8 July 2015. www.sf-encyclopedia.com/entry/scientifiction.

Nayar, Pramod K. *Posthumanism*. Cambridge: Polity, 2014.

Nevins, Jess. "May Day, 1871: The Day "Science Fiction" Was Invented," Gizmodo, 29 April 2011. <https://io9.gizmodo.com/5796919/may-day-1871-the-day-science-fiction-was-invented>.

Nicholls, Peter, and David Langford. "Speculative Fiction." *The Encyclopedia of Science Fiction*. Eds. John Clute, David Langford, Peter Nicholls and Graham Sleight. Gollancz, 15 Sept. 2017. http://www.sf-encyclopedia.com/entry/speculative_fiction.

Poynton, Michelle. *Science Fiction Theatre as an Aspect of Digital Participatory Culture*. 2016. State University of New York. MA Thesis.

Rieder, John. "What is SF? Some Thoughts on Genre." *A Virtual Introduction to Science Fiction*, Ed. Lars Schmeink. 2012. <http://virtual-sf.com/wp-content/uploads/2012/04/Rieder.pdf>.

Rose, Mark. *Alien Encounters*. Cambridge: Harvard University Press, 1981.

Sawyer, Andy and Peter Wright. Eds. *Teaching Science Fiction*. New York: Palgrave Macmillan, 2011.

Sorkin, Andrew Ross. "Interview with the Lifelike Hot Robot Named Sophia." YouTube. CNBC, 25 October 2017. <https://www.youtube.com/watch?v=S5t6K9iwcdw>.

Stableford, Brian M, John Clute and Peter Nicholls. "Definitions of SF." *The Encyclopedia of Science Fiction*. Eds. John Clute, David Langford, Peter Nicholls and Graham Sleight. Gollancz, 19 Dec. 2017. [http://www.sf-](http://www.sf-encyclopedia.com/entry/definitions_of_sf)

[encyclopedia.com/entry/definitions_of_sf](http://www.sf-encyclopedia.com/entry/definitions_of_sf).

Suvin, Darko. *Metamorphoses of Science Fiction*. New Haven, CT: Yale University Press, 1979 .

Tomas, David. *Feedback and Cybernetics: Reimagining the Body in the Age of the Cyborg*. *Body & Society*. Vol 1, Issue 3-4, pp. 21 – 43 (Nov. 1995)

Vint, Sherryl.. "Science Fiction and Posthumanism." University of California. May 2015. <http://criticalposthumanism.net/genealogy/science-fiction/>.

Westfahl, Gary. "Gernsback, Hugo." *The Encyclopedia of Science Fiction*. Eds. John Clute, David Langford, Peter Nicholls and Graham Sleight. Gollancz, 4 Apr. 2017. www.sf-encyclopedia.com/entry/gernsback_hugo.

Willingham, Ralph Allen. *Science Fiction and the Theatre*. 1991. University of Illinois. PhD Dissertation.