UNIVERZITA PALACKÉHO V OLOMOUCI

FILOZOFICKÁ FAKULTA

Katedra anglistiky a amerikanistiky

The Role of Artificial Humans in American Literature
Umělí lidé v americké literatuře

Diplomová práce

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Olomouc 2018

Prohlašuji, že jsem tuto diplomovou práci vypracovala samostatně pod odborným dohledem vedoucího práce a uvedla úplný seznam citované a použité literatury.

V Olomouci dne ………   Vlastnoruční podpis:

Obsah

1. **Introduction**

The aim of this text is to analyze, determine, and explain the role of artificial humans in American literature. It will attempt to not only define the role artificial humans portray, but to also document and clarify the effects of their use, as well as the environment in which they appear. The subject of artificial humans will be studied with the help of three novels, namely Philip K. Dick´s *Do Androids Dream of Electric Sheep?* (1968)[1] Robert Silverberg´s *Tower of Glass* (1970)[2] and Paolo Bacigalupi´s *The Windup Girl* (2009).[3] All of these primary sources were chosen because of their significance not only within the scope of the science fiction genre, but also within American literature itself.

While the number of works dealing with artificial humans is large, this text will mainly focus on literary works of American writers. Even then, however, it cannot completely ignore the wide range of media dealing with the subject, though it shall not explore these outside of the introduction itself. With that in mind, it is also important to say that it would be impossible to completely ignore the cultural and social context of the chosen literary works, and which will be thus, in specific instances, sparingly taken into account by the discussion and analysis of the chosen primary literature, as well as the immense whole that is the science fiction genre. This is because, as M. Keith Booker states in *The Dystopian Impulse in Modern Literature* "In the twentieth century our world is shaped by science."[4]

Having said that, the tradition of artificial humans is one spanning past even the emergence of the science fiction genre as such. This is because the first mention of an artificial humanoid creation may, arguably, be accredited to the Roman poet, Ovid, as he describes a sculptor, Pygmalion, who falls in love with his own statue, and after she is resurrected by Aphrodite, marries her.[5] This might, however, be too far from what one might, in the twenty-first century, perceive as an artificial human. A much more fitting example can be thus found in *Frankenstein* by Mary Shelley, as the young scientist succeeds in creating a completely new existence, namely, his famous monster. Despite this, it was nearly one hundred years later, following the slow emergence and

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[1] Philip K. Dick, *Do Androids Dream of Electric Sheep?* (London: Weidenfield and Nicolson, 2012).
[2] Robert Silverberg, *Tower of Glass* (New York: Bantam Books, 1980).
[3] Paolo Bacigalupi, *The Windup Girl* (London: Orbit, 2010).
[4] M. Keith Booker, *The Dystopian Impulse in Modern Literature: Fiction as Social Criticism* (Westport: Greenwood Press, 1994), 5.
[5] Publius Ovidius Naso, *Metamorphoses*

popularization of the science fiction genre, that the Czech author Karel Čapek first named the artificial creation in his drama *R.U.R.* (1920).[6] From then on, artificial humans moved in science fiction from Isaac Asimov to Philip K. Dick, and ultimately into the reality of today's technology. 2014, for instance, saw the first possible passing of the Turing test by an AI simulating a 13-year-old Ukrainian boy,[7] while in 2015, the first mechanical actress, Geminoid F, starred in the Japanese movie, *Sayonara*.[8] With past fiction slowly becoming reality, there are many, who similarly to James Barrat, believe in the fast approaching end of humanity at our own hand.[9] He is far from being the only one however, as a similar vision seems to appeal to many a film-maker, resulting in such cinematic endeavors as *Westworld*, *The Terminator*, or *The Matrix*. Yet even without the flashy visions of Hollywood there is no denying that the nature of artificial humans is something that draws the attention of many, no matter the form. This might be because, as A. Bowdoin Van Ripe argues, they are really stories about humans, and what it means to be one,[10] or because, as Brian Stableford maintains, such fiction "usually tries to consider what is in a broader context of what might be and what ought to be."[11] It was precisely these thoughts regarding artificial humans that were my inspiration for this study, and that led me to explore, analyze, and determine the role of artificial humans in American Literature.

In order to be able to do that, I shall first briefly explore the history of American science fiction and introduce the chosen authors and their works. With the help of secondary literature, I shall then determine, what is understood under the term artificial human, and in what relation this term stands to other popular labels, like robot or android. Following this, I shall focus on artificial humans as they appear in the narrative of the chosen texts, exploring the individual characters, as well as the presented storyworlds of the primary literature. Furthermore, the text will also deal with the concept of social criticism and how it impacts the conception of artificial humans. Specifically then, I will address theories dealing with the portrayal of artificial humans

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[6] Karel Čapek, *R.U.R.* (Rockville: Wildside Press, 2010).

[7] "Computer AI passes Turing test in world first," *BBC news*. 09. 06. 2014 (accessed: 01. 12. 2016). http://www.bbc.com/news/technology-27762088.

[8] *Sayonara*, directed by Kōji Fukada (2015, Tokyo: Phantom Film), film.

[9] James Barrat, *Our Final Invention: Artificial Intelligence and the End of the Human Era* (New York: Thomas Dunne Books, 2013)

[10] A. Bowdoin Van Ripe, *Science in Popular Culture: A Reference Guide* (Westpoint: Greenwood Publishing Group, 2002), 11.

[11] Brian Stableford, *Science Fact and Science Fiction: An Encyclopedia* (Abingdon: Routledge, 2006), xix.

as a representation of specific minorities in American society. With connection to this and the proposed aspect of social criticism I propose an exploration of dystopian literature, allowing for a more in depth study of the aforementioned characters of artificial humans and the overall impact their literary inclusion has on the overall narrative, as well as the works themselves. Following this exploration and analysis of artificial humans, I will then attempt to determine, define and explain the role of artificial humans as portrayed in the chosen primary literature, including an explanation as to why this role is used, and why it can or cannot be portrayed by any other possible character. The resulting text should thus include not only a clear definition and in depth exploration of the characters of artificial humans and the narrative they appear in, but also a definitive answer as to why they are so widely used and what effect this use of artificial humans in literature has.

2. **Artificial Humans in American Literature**

Artificial Humans are fictional scientific creations mostly associated with futuristic scientific concepts. To be able to define Artificial Humans, however, one must first understand the context in which they appear and the history associated with the term itself. This is why this chapter will deal with Science Fiction, as well as the chosen literary sources, introducing the chosen settings, works and authors in such a way as to create a basis for further exploration and analysis.

Science Fiction is a term first coined by the poet William Wilson, then signifying "a kind of fiction that would dramatise discoveries in science."[12] Wilson was far ahead in the vision of science fiction, however, and the term only surfaced years after the literary scene caught up. After all, the world first needed to move towards sciences as such, and eventually from them, to be able to appreciate the fictional range of literary imagery the science fiction genre represented. Even nowadays, the definition is all but specific, defining science fiction as "Stories that involve discovery or application of new scientific principles, such as time travel or psionics, or new technology, such as nanotechnology, faster-than-light travel or robots, or of new and different political or social systems (e.g., a dystopia, or a situation where organized society has collapsed)."[13] At the same time, it was always being largely influenced by the current cultural situation, spawning hundreds of subgenres within its original boundaries, ranging from space opera to cyberpunk. While slowly becoming a universal subject however, its main themes were, in fact, connected with specific areas of activity. Western science fiction was, for example "Criticised both tacitly and explicitly for its abandonment of scientific speculation in favour of enthusiastic expansions of the ideologies of imperialism colonialism and technofetishism."[14] It would be quite far from truth though, were one to maintain that the genre did not, in its many years of influence, go through some universal changes. One of them being the move from a genre whose fundamental forms were the short story and the novella into one whose primary form was the novel.[15] The most important change in the context of artificial humans was however the exploration of humanity and its relation to the presented scientific aspects. David H. Keller, for example, elected to focus on this aspect of scientific progress,

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[12] Stableford, *Science Fact and Science Fiction,* 462.
[13] Frederic P. Miller, *Cyberpsychology*, ed. Agnes F. Vandome, John McBrewster (Beau Basin: Alphascript Publishing, 2016), 92.
[14] Stableford, *Science Fact and Science Fiction*, 466.
[15] Stableford, *Science Fact and Science Fiction*, 467.

exploring how "all kinds of technological advance, no matter how seemingly benevolent, posed a terrible threat to human psychological and spiritual wellbeing."[16] And he certainly was not the only one. Isaac Asimov introduced the readers not only to the wonders of space exploration and new age colonialism, but also to the three laws of robotics and the Frankenstein complex, which "(…) examines human antipathy against machinery, considering it as a reflexive xenophobic repulsion directed against anything new or strange…"[17]

This change of direction in science fiction led to a new kind of setting, exploring "Earthclone scenarios and modestly transformed futures, whose backgrounds did not need much detailed explanation."[18] A move, which for many readers brought the themes and motifs of the works from far space back home by constructing analogies to already existing real-world historical events. While it is thus completely true that the subject of science fiction is universal[19] – be it in matter or in setting – I would argue for science fiction to hold a special significance in regard to American history and culture, which is precisely why I have decided to choose this context. One would only have to consider a number of moments in history to see the inspiration for many a science-fiction tale. Be it the settlement of a new frontier, which in itself holds the wonder of discovery, survival and the erection of new civilizations and societies – or the drive in the turn of the century sciences, pushing forward through the discoveries until it was possible to conquer the moon itself. From 1929 to 1945, for example, the term ''science fiction'' was almost exclusively reserved to American magazines.[20] And it is not hard to imagine why, as The United States hold a firm position in the world as one of the world's great powers. Its individualism paving the way for it as the land of the free, and the everlasting ideal of the American dream. And what more is science fiction than the materialization of visions and dreams? The more so, because they are rooted in a plausible and logical soil of science and culture. Talking about the whole scope of science fiction, however, is a matter of nearly undefinable size. This is why I have elected to deal with a specific sub-genre of science-fiction, dealing with the scientific creation not of space-ships, portals or time-traveling machines, but that of Individuals

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[16] Stableford, *Science Fact and Science Fiction*, 464.
[17] Stableford, *Science Fact and Science Fiction*, 38.
[18] Stableford, *Science Fact and Science Fiction*, 467.
[19] See Stableford, *Science Fact and Science Fiction*, 466.
[20] See Stableford, *Science Fact and Science Fiction*, 465.

themselves. For which other country could find the justifiable power to become the source of new life, than the one which was once fittingly known as the new world.

2.1 *Do Androids Dream of Electric Sheep?*

Written by Philip Kindred Dick, born 1928, *Do Androids Dream of Electric Sheep?* has since become one of many science fiction classics. Dick started his career in 1952, is the author of many critically acclaimed novels and short stories and wrote for magazines like *Planet Stories*, *The Magazine of Fantasy & Science Fiction*, or *Satellite Science Fiction*.[21] *Do Androids Dream of Electric Sheep?* follows the character of Rick Deckard on his mission to physically "retire" a number of escaped artificial humans. Deckard has to navigate the post-war remains of Earth to uncover who is and isn't human, while his prey hides and defends itself in a struggle of power and survival between artificial life and humanity.

2.2 *Tower of Glass*

Tower of Glass was written by Robert Silverberg, born in New York in 1935. Silverberg wrote his first novel *Revolt on Alpha C* when he was 19 years old and went on to write hundreds of other science fiction stories over his life, published in magazines like *Fantastic*, *Galaxy Science Fiction*, or *Science Fiction Quarterly*. In the course of his life, Silverberg has been awarded four Hugo, three Locus and six Nebula awards.[22]
Tower of Glass is one of Silverberg's later books, dealing not only with the traditional space exploration of early science fiction, but also with the nature of men and their legacy. The novel follows the character of Simeon Krug, a world-renown entrepreneur and inventor, on his quest to reach a distant planetary nebula, from which mankind has received a mysterious set of signals. To this end, Krug has instructed his revolutionary invention, his androids, to start building a gigantic tower of glass containing a device which should make communication with the planetary nebula possible. While the tower rises, the reader is introduced to not only Krug himself, but also his son, Manuel, and a handful of Krug's associates, as well as a number of the androids working on the monumental glass tower, until an incident involving the death of an android puts into motion an unexpected chain of events, exploring the nature and culture of not only Krug's creations, but also of the remaining humans on earth, until both are thrust into a

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[21] See Ondřej Neff, Jaroslav Olša, *Encyklopedie Literatury Science Fiction* (Praha: H&H, 1994), 231.
[22] See Neff, Olša, *Encyklopedie Literatury Science Fiction*, 358.

revolutionary finale, where the grand tower is destroyed and Krug, as well as his androids, are left with nothing but hope for the future.

2.3 *The Windup Girl*

The Windup girl is the debut novel of Paolo Tadini Bacigalupi, born 1972. Bacigalupi has since written a number of novels and short stories, published in magazines like *Asimov's Science Fiction*, or *The Magazine of Fantasy & Science Fiction*. Bacigalupi has been awarded the Hugo, Nebula and a number of other awards for his literary work. *The Windup girl* explores a depleted city and society dealing with bioengineering, degradation and the question of humanity's legacy. The text follows a number of characters, including company agent Anderson Lake, force captain Jaidee Rojjanasukchai, factory worker Hock Seng, and the artificial owned girl Emiko, as they each try to survive and better their situation within the complicated Thai city, until all the inside machinations are put into chaos within a fiery revolution brought on by Emiko, after which only a lucky few are left standing over the peaceful flooded remains.

3. **Artificial Humans**

The purpose of this thesis is to determine the role of artificial humans in American literature. But to be able to do that, one must first define what an artificial human is. Even the more so, when one is considering the number of terms associated with artificial humans, each featuring a number of cultural and literary connotations. First of all, it is important to state that when talking about artificial humans, I am not talking about a virtual entity, that is, a technological construct lacking a body, mostly known as virtual or artificial intelligence. This is because they are concepts very closely related to a different sub-genre of science fiction, namely cyberpunk, and the topics of virtual reality, as well as post humanism. I will also not be considering altered humans, that is, cyborgs, which often represent the scalar middle ground between what one considers artificial humans and real-life human beings. I will, however, talk about the artificial humans in relation to robots and androids, and to the terminology that can be found in the chosen primary literature. But before we do that, let us first consider the definition of artificial humans as such.

Oxford Dictionary defines something artificial as "Made or produced by human beings rather than occurring naturally, especially as a copy of something natural."[23] This definition helps in specifying the creator of artificial humans as one belonging to the human race and helps establish the first of many aspects the concept entails, namely, presenting the man-made creation as something that is much different from the natural creation of things, that is, something being put into contrast with the natural evolution of a human being. Rudolf Drux defines artificial humans in his text "Künstlicher Mensch" as a technically produced creature that should be through its cognitive abilities and anthropomorphic body represented as something similar to a human.[24] If one follows the assumption, that an artificial human would be created through technical means, in humanity´s own image, then it follows that the final creation should thus be fairly close to the model image of the source material. This is why I would argue for the consideration of the use of the term "artificial human" only in those instances, when the artificial creations are represented as something closely resembling the humanoid body, as well as the humanoid cognitive behaviour. This is also the reason why creations that could not be classified as human-like will not be taken into account, which explains,

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[23] "Definition of artificial in English," *Oxford living dictionaries* (accessed 20.04.2018). https://en.oxforddictionaries.com/definition/artificial.

[24] See Rudolf Drux,"Künstlicher Mensch," in *Phantastik: Ein interdisziplinäres Handbuch* ed. Hans Richard Britnacher, Markus May (Weimar: J.B. Metzler, 2013), 391-392.

why the thesis does not, for example, deal with the world-renown author Isaac Asimov and his work, *I, Robot*, heavily focusing on artificial human, as well as artificial intelligence and their existence in the human world. While these artificial creations do possess the ability to reason and have far-reaching cognitive abilities, their appearance is presented as in no-way similar to a humanoid one, featuring only one, disputable instance, where such a definition could be applied. The character in question is Stephen Byerley in the short story "Evidence."[25] This character could, however, only be considered as such, were he, in fact, an artificial human, which remains till the end of the short story ambiguous. This is why the thesis shall only consider characters, which are explicitly defined as being artificially created and whose status as such can be proven on hand of evidence provided in the text of the chosen literature itself. This is also why the text shall shy away from the disputed characters, whose status as an artificial human is not explicitly defined within the source material.

While defining artificial humans, it is also important to consider the discrepancies among the terms used for labelling such creations. As already mentioned, one of the terms to describe artificial humans was coined by Karel Čapek in his play *R.U.R.* and referred to these creations as "Robots." In the context of R.U.R, the term was created to denote the artificially created labourers, while today, the term is very much used in accordance with Asimov´s conception of the mechanically constructed workers. There is, however, undisputable proof that Čapek's term, as it is used in the play, is an exact example of what Drux describes as an artificial human in his text. This is because one of the characters, in the course of the play, confuses one of the robots with a human, and does not believe that the creation could truly be artificial.[26] Čapek also introduces another very important aspect in perceiving artificial humans - the question of matter. If a creation is to be considered to have a human-like aspect in regard to the structure of a humanoid body, then the anthropomorphic process cannot involve only technical means, but has to be based, at least partly, on biological matter. While this aspect might not, at first, precisely match with the dualist distinction between natural and artificial, it is important to state, that the biological matter used in the construction of artificial humans, is, like them, of human construction. This concept is exactly what Čapek introduces, stating that the androids were, in fact, created from the

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[25] See Isaac Asimov, "Evidence," in *I, Robot*, trans. Oldřich Černý (Praha: Odeon, 1981), 191-219.
[26] See Karel Čapek*, R.U.R.* 11.

imitation of live matter through chemical synthesis.[27] In the context of modern science fiction, however, such a description would place Čapek´s creation under the label of android. This is because Brian Stableford defines androids as "artificial humanoids made from synthetic flesh rather than inorganic components."[28] Jeff Prucher also supports the introduced theories, by defining an android as "an artificial being that resembles a human in form, especially one made from flesh-like material."[29] *The Routledge Companion to Science Fiction* defines android as a "nonhuman" entity, describing it as a "biological variant" to robots.[30] This overall agreement supports the theory of an artificial human being created in humanity´s image and clears the use of the term android for the purposes of this thesis. Meaning that in the context of this text, the label android will be used to denote an artificial human creation, which does, in its form and cognitive abilities as well as its components, imitate a human. To which degree this imitation is successful, however, seems to be a debatable matter. While Čapek introduces his creations as something virtually indistinguishable from a human being in its form, he also does not fail to add a number of clear deviations, which reinforce the distinction between the artificial humans and their creators. This is why I find it important to explore the subject of artificial humans on each of the chosen texts separately, as to be able to not only determine whether they conform to the overall definitions of artificial humans, but also to be able to illustrate and explore the different approaches that the texts employ to differentiate between an artificial human and a human being, as it is precisely this duality that initially allowed for the conception of such a creation that artificial humans are.

3.1 **Artificial Humans in *Do Androids Dream of Electric Sheep?***

Despite Dick introducing the label of android in the title, the previously presented example proves that a given terminology does not always correspond to the denoted definition. This is why each of the chosen literary works will be carefully analysed with the help of found evidence that would place the artificial humans appearing in the text either within or outside of the boundaries of the given definition of artificial humans. In the case of *Do Androids Dream of Electric Sheep?* the artificial creations are first

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[27] See Čapek, *R.U.R.* 7.
[28] Stableford, *Science Fact and Science Fiction*, 22.
[29] Jeff Prucher, *Brave New Words: The Oxford Dictionary of Science Fiction* (Oxford: Oxford University Press, 2007), 6.
[30] See *The Routledge Companion to Science Fiction*, ed. Mark Bould, Andrew M. Butler, Adam Roberts, and Sherryl Vint (Abingdon: Routledge, 2009), 495.

introduced as a weapon of war, which has evolved into "the mobile donkey engine of the colonization program."(Dick 2012, 12). This conception of an artificial human would certainly match the production process described by Čapek, but what is more, this introduction also features the phrases "humanoid robot" and "strictly speaking, the organic android."(Dick 2012, 12). The problem is, however, that these words are primarily used to describe the artificial humans of the past rather than the ones the text goes on to deal with, that is, the current advanced model. While it might be safe to assume that the current model would thus feature the same basis as the previous ones, I myself would argue for the conception of the current model of an artificial human as a separate unit. This is not only to avoid unwanted confusion considering the artificial humans, but also to be able to document the precise parameters associated with a particular artificial unit within the text, namely, the models fitted with the Nexus-6 brain unit. (See Dick 2012, 22).

This distinction between brain units within the text is important because of the means of distinction between the artificial humans and the human beings in the book. This is because the artificial creations have assumed such a form of imitation of the humanoid body that a distinction based solely on these first hand parameters is no longer possible. (See Dick 2012, 22) While such a distinction does answer the requirement of form given by the definition of artificial humans, stating clearly that they are indistinguishable from the basic physical human form, it is far from addressing the other issues, namely, the cognitive functions and the biological components. This failure in recognizing the difference between a human being and an artificial human leads to a significant shift in the imitation, as it brings the needs of distinctions from physical, to mental, or cognitive functions of the given units. Rick Deckard remarks in regard to this distinction, that

> The Nexus-6 android types (…) surpassed several classes of human specials in terms of intelligence. In other words, androids equipped with the new Nexus-6 brain unit had from a sort of rough, pragmatic, no-nonsense standpoint evolved beyond a major — but inferior — segment of mankind. (Dick 2012, 23)

This introduced problematic regarding the distinction between and artificial human and a human being is also the reason for the introduction of a number of tests in the text, most notably then the Voigt-Kampf test. This particular test was designed, because, as Deckard states "no intelligence test would trap such an andy,"(Dick 2012, 23) making

human and non-human distinction in casual encounters impossible. While the Nexus-6 brain unit is thus intellectually very advanced, one encounters a strange component in its cognitive function that is solely responsible for its distinction from a human being. While some might thus argue that such a clear difference between the cognitive functions of an artificial human and a human being should place these artificial units outside of the definition of artificial humans. I would claim this is the distinctive feature that makes the creation artificial. This, however, is a feature which shall be explored further in a different chapter. Being devoid of these specific emotional responses, the artificial humans fitted with the Nexus-6 brain unit also seem to exhibit a higher level of pragmatic thought. Though highly effective, this way of thinking also makes the artificial humans seem often cold and detached. As John Isidore comments "A coldness. Like, he thought, a breath from the vacuum between inhabited worlds, in fact from nowhere: it was not what [Pris] did or said but what she did not do and say"(Dick 2012, 54). A similar detachment can also be seen in the instance when Rick Deckard confronts a female artificial humans, Luba Luft, describing that "her tone held cold reserve – and that other cold, which he had encountered in so many androids. Always the same: great intellect, ability to accomplish much, but also this" (Dick 2012, 79). This instance is notable not only for Rick Deckard´s comment, but also because Luba eventually succeeds in derailing Deckard´s attempt at her life by derailing him with an abundance of arguments, like for example raising a possibility of him being an artificial humans based on the assumption that "An android (…) does not care what happens to another android" (Dick 2012, 80). This proves that it is, in fact, not only the intelligence of the Nexus 6 brain, but also its practical, argumentative and logical capabilities, which mark the high level of its cognitive abilities.

Taking all that into account, I believe, that the given evidence of the basic cognitive function of the Nexus-6 brain unit being superior to that of a human brain, are enough to confirm its direct imitation of the cognitive functions of a human being. The single remaining aspect of the Nexus-6 brain unit android model to consider is thus its creation, that is, the matter used in the creation of its form. Thankfully, one of the artificial humans themselves describes the components featured within the units, explaining their inner workings, stating, that the nexus-6 models do, in fact, have brain cells, which have to be supplied with oxygen via blood (See Dick 2012, 152), as well as a spinal ganglia (See Dick 2012, 150). The artificial human even later confirms that their anatomy is, as is the case with humankind, based on cells. This particular part of

imitation, however, comes with a specific problematic. While the Nexus-6 models are able to pass for humans, they are unable to live as long as them, having a problem with cell replacement resulting from the imitation of biological matter, which the Rachel Rosen unit describes as leading to a phenomenon she names "wearing out."(Dick 2012, 152) This gives them a lifespan of approximately four years (See Dick 2012, 154). Despite this, even Deckard ultimately admits, that the model is biologically alive, because it is "not made out of transistorized circuits like a false animal,"(Dick 2012, 155) but is rather "an organic entity." (Dick 2012, 155) While this does bring about the existential question of perception in regard to the artificial humans, it also proves the definition of an artificial human to be identical with the label of an android as used by Dick in the context of *Do Androids Dream of electric Sheep?*, as the Nexus-6 model does not only fulfil the cognitive and anthropomorphic conditions, but also the biological prerequisites to be defined as such.

3.2 **Artificial Humans in *Tower of Glass***

Similarly to Dick, Silverberg also elects to refer to the artificial humans appearing in The *Tower of Glass* as androids. From the first page on, they are also immediately designated as synthetic humans (See Silverberg 1980, 2). At the same time, however, they are also immediately referred to in connection to their creator, Simeon Krug, being identifies as "his androids."(Silverberg 1980, 2) Silverberg goes on not only to describe one of Krug´s creation on the following page, but also to draw a division between the means of creation, as well as stating the political situation in regard to the existence of artificial humans, describing the existence of a political party called the Android Equality Party (See Silverberg 1980, 7). This effectively sets the tone for the book by opening with a number of distinctions between the human and the artificial characters. But while this does support the chosen terminology, one must again move to the specific chosen definition to determine, whether this is truly the case and if the artificial humans appearing in *Tower of Glass* can truly be considered as such. In this case, however, one must also first determine which kind of a creation one is taking into consideration, as Krug´s synthetic humans can be categorized into three distinct classes: the Alphas, Betas, and Gammas. While all these have the same primary goal, they do differ in a number of specific and important aspects. It is thus for this reason, why I have decided to primarily focus on the Alpha models, who appear the most throughout the text and who are also its focus, which makes them the ideal candidates for the

analysis. With that taken into consideration, it is time to move on to the analysis of the Alphas as they appear in the context of *Tower of Glass*.

Focusing on the form of the synthetic humans first, it is important to consider the intentions of their creator, as it is stated that "He [Krug] wanted them to look human (aside from the necessary modification) and to do most human things." (Silverberg 1980, 11-12) While this might be an argument for the conception of androids in the most human-like manner, the included aside phrase brings about undeniable disputes. What are, then, the necessary modifications mentioned? Firstly, it is the fact that Krug´s creations do, in most cases, lack bodily hair. They do possess hair and eyebrows, yet the rest of their bodies appear to be completely bare. Aside from this, they also seem to have idealized, plastic faces, and, most importantly, the very specific "deep red, faintly waxy skin of an android." (Silverberg 1980, 3) While this specific modification does make it possible for the android to be immediately distinguished from a human, I would like to mention a specific instance in the text, where this is not the case. While exploring the culture of his father´s creations, Krug´s son Manuel decides to visit Gemma Town, a place not suitable for humans. To visit Gemma Town, Manuel disguises himself as an artificial human, donning a specific style of light clothes, as well as a red spray-tan. With these simple alterations, he is able to pass, as long as the form is concerned, for a synthetic human (See Silverberg 1980, 118). This is why I would argue for this specific instance to supply enough evidence for the form of Krug´s creations to be considered enough human-like for it to correspond with the given definition of artificial human. Next, I would like to address the designation of Krug´s creations as synthetic humans. In the text, the phrase is used to specifically denote a clear difference between a mere mechanical unit, and how Krug designed his creations, stating that "He had chosen to create synthetic humans, not mere machines."(Silverberg 1980, 12) Such a conception of matter closely mirrors the conception of artificial humans as they appear in Čapek´s R.U.R. but at the same time, appears to be devoid of any specific details. Luckily, the text does feature an instance, where the creation of these synthetic humans is largely elaborated upon. Here one learns, that the creation is, in fact, chemical based, creating a basic DNA structure that determines the composition of matter that is made to duplicate, eventually "building up living molecules in precisely the way it happens in nature,"(Silverberg 1980, 39) This process takes place in the co-called Vats, essentially artificial wombs, from which synthetic embryos come from before they are subjected to accelerated growth (See Silverberg 1980, 40). While not entirely identical to human

reproduction, this chemical process describes just enough of the processes involved in the production of biological matter, as to be itself considered such, fulfilling the second aspect of the chosen definition of artificial humans. For the definition to be considered in its full effect, however, one must address the cognitive abilities of the Alpha class of androids featured in *Tower of Glass*.

While the existence of a political party manned exclusively by the Alphas does suggest a high level of intelligence, the analysis must also consider other aspects of their psyche for the results to be completely conclusive. As with many aspects of the text, the first mention in regard to the psychological capabilities of the units are given by Krug, as he is said to have created his creations as "complex in personality," (Silverberg 1980, 42) Another mention of their capabilities comes from the point of view of one of them, when the character Thor Watchmen compares his ability of jacking into a computer circuit and electronically over watching multiple building operations, to that of a human. "No human could handle this," he observes. The same synthetic human is also later seen arguing over ideologically political issues with a member of the android political party, which suggests not only high intelligence, but also argumentative capabilities of the units (See Silverberg 1980, 71). The most obvious instance of their cognitive functions, however, can be seen when a human and Thor watchmen are made to share their consciousness (See Silverberg 1980, 169). Such an act is, in the text, only meant for humans who are very close to one another, as they are free to explore aspects of each other's psyche. This instance of the sharing of minds designed only for humans serves as a direct confirmation of the last aspect of the given definition, confirming that the creations presented in *Tower of Glass* do, in fact, fulfil the three given requirements to be considered artificial humans in the given context.

3.3 **Artificial Humans in** *The Windup Girl*

In Bacigalupi´s *The Windup girl*, the origin of the artificial humans is discussed very soon after the introduction of a character of this group. Their bodies are immediately described as "a collection of cells and manipulated DNA"(Bacigalupi 2010, 49) and the reader even learn about the elements of their production, as the text describes the artificial humans coming from test tubes and growing in créches. (Bacigalupi 2010, 50) While this accounts for the biological material used in the creation of the artificial creatures, their physical appearance seems to be a more problematic matter. This is because their physical movements are designed to be "stutter-stop flash-bulb

strange."(Bacigalupi 2010, 51) and are, in fact, on multiple occasions, compared to the movement of windup toys. This build in function makes it for many characters possible to quickly and efficiently identify an artificial human. While this could be taken as an argument to place the artificial humans in *The Windup Girl* outside of the definition chosen in the context of this thesis, I would argue for further examination. This is because a scientist discussing this precise trait states that "The windup movement is not a required trait. There is no reason it couldn´t be removed."(Bacigalupi 2010, 505) This statement shows that the specific pattern of movement of the artificial humans is something added to the model precisely for the reason of making it distinguishable from human beings, logically implying that without this alteration, the platform would be virtually indistinguishable. In fact, in the course of the book, an artificial human is on multiple occasions able to pass for a human being when staying still (See Bacigalupi 2010, 224) or deliberately concealing these movements (See Bacigalupi 2010, 360). This proves that despite these designed aspects, the artificial humans are, in fact, physically completely indistinguishable from human beings and thus fulfils the requirements of the definition of artificial humans in regard to the physical requirements. As for their cognitive capacities, the artificial creations do possess enough intelligence to be taught a number of languages and function as translators (See Bacigalupi 2010, 420), as well as being capable of independent though, assumptions, planning, and criticism – as displayed by the character of Emiko, when the narration addresses her thoughts (See Bacigalupi 2010, 317). It is thus save to say that the artificial humans featured in *The Windup Girl* meet all the requirements of the given definition and are to be considered as a valid example of artificial humans in the chosen context.

4. Artificial Humans in Narrative

While exploring the aspects of the artificial humans in the chosen source material, one is sure to encounter a number of features that do not only define the given entity as one creature or another, but that at the same time help to explore the situation of such creations within the world. This is why a certain defining aspect can be understood as a hint towards a particular understanding of the role the artificial humans are set to portray within the chosen source material. To be able to analyze these aspects more closely, one must approach them from a different direction, taking into account not only the artificial humans themselves, but also the narratives that they populate, as well as the themes and motifs they can be associated with within the given texts. This conception of the role of artificial humans as something connected to the overall narrative, as well as themes and motifs of the text, is connected to the study of narrative texts itself. As Seymour Chatman maintains in *Story and Discourse*, characters are an element of narrative. They are as important as events or setting, being one of the main building blocks in creating a story.[31]

This is why I would argue for the importance of the determination of the role of a certain type character. As it is through this definition that the narration and the story itself may gain new previously unexplored connotations or that the conception of a certain kind of character may be changed to feature a number of new contexts. Such a theory is also supported by Tomáš Kubíček, Petr A. Bílek, and Jiří Hrabal, who state, that a character has a specific task within the narrative world, that their actions are an expression of a specific theme, and that it is never random, but serves in favor of the narrative.[32] This is precisely why this thesis focuses on the use of a character within narrative and ultimately also on the definition of its role. This is because it is inherently through the narrative that the setting connected to the roles of the characters can be explored and defined, making it possible to explore these aspects on a much clearer and detailed scale. This is also why this chapter will explore each narrative on hand of one chosen character that has been previously explicitly defined as an artificial human, as well as the literary context given in regard to this definition and the assigned role associated with it, exploring not only the attitudes of the given characters themselves and the attitude of the given literary world towards them, but also other concepts

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[31] Seymour Chatman, *Story and Discourse* (Ithaca: Cornell University Press, 1980), 19.
[32] See Tomáš Kubíček, Petr A. Bílek, Jiří Hrabal, *Naratologie: strukturální analýza vyprávění* (Praha: Dauphin, 2013), 62.

involved with the given conceptions of artificial humans that influence and alter these attitudes within the chosen narratives.

4.1 **Artificial Humans in The Narrative of** *Do Androids Dream of Electric Sheep?*

When analysing *Do Androids Dream of Electric Sheep?* one finds there is inherently an artificial character who seems to stand above the rest of the android units. Namely, Rachel Rosen, the first artificial human the reader, as well as the character of Rick Deckard, encounters. Upon their first encounter neither the readers, nor Deckard, are sure of Rachel´s true nature, that is, whether she is truly human, or not, which neatly sets up the following unfolding events of the text. In fact, Rachel is given very little consideration until her status as a human is questioned. Rachel first appears as an employee of Rosen Association, the company which is responsible for the production of the Nexus-6 brain unit (See Dick 2012, 31). She is later revealed to be part of the Rosen family, with her uncle, Eldon, as the head of the Association. She seems to be quite displeased at the request of the Police department to test out the Voigt-Kampff scale at a number of the androids to determine its reliability, as this could potentially completely stop the production and ruin the company (See Dick 2012, 35). This is when Rachel is used in a ploy to discredit the test by having her be the first subject who takes it. When her reactions register outside of the designated human scale, and Deckard concludes she is an android, it is stated that she is actually human, but registered as outside of the scale because of other factors, like the lack of experience and youth (See Dick 2012, 41). This instance in the text marks a possibility of the scale not being accurate and wipes out the detective´s means of identifying androids. "We have you, Mr Deckard,"(Dick 2012, 43) remarks Rachel, before the Association moves towards blackmail. It is then, however, that Deckard realizes he is being fooled and reconsiders his standpoint. He quickly disputes the Associations arguments and finally, with the help of the Voigt-Kampff test, reveals Rachel as a true artificial human (See Dick 2012, 47).

This instance, however, does not mark their one and only encounter, as Rachel herself contacts Deckard later on, offering to help him with finding the escaped Nexus-6 units. Specifically, she offers her personal assistance in approaching the androids herself, which Deckard quickly declines (See Dick 2012, 72). Soon, however, he seems to slowly reconsider, judging how hard it was to retire a single Nexus-6 unit in the field. He thinks of Rachel while wondering about the natur of androids, stating that "Most

androids I´ve known have more vitality and desire to live than my wife."(See Dick 2012, 76) From then on, Deckard ponders his feelings towards androids, until he finally contacts Rachel again, requesting she come see him before he goes on to face the rest of the androids, which she ultimately does once Deckard promises to give up on the remaining three androids for the night (See Dick 2012, 144). Once together, the pair discusses the remaining androids, with Rachel finding out that one of them is the same type she is, expressing that she feels "Something like [empathy]. Identification; there goes I. My god: maybe that´s what´ll happen. In the confusion you´ll retire me, not her. And she can go back to Seattle and live my life. I never felt this way before. We are machines, stamped out like bottle caps. It´s an illusion that I – I personally – really exist; I´m just representative type."(Dick 2012, 149) She follows this by revealing why the Rosen Association wanted her to help Deckard: so as to collect information about the Voigt-Kampff test (See Dick 2012, 150). She also states she would never have helped him defeat the androids, that she is "emphathetic" about herself, and that she does not dare go with him for fear of the similar model taking her place (See Dick 2012, 150). Once the idea of sexual relations between the two starts to materialize, Rachel changes her point of pondering whether the inability to have children is a loss for androids.

> I don´t really know. I have no way to tell. How does it feel to have a child? How does it feel to be born, for that matter? We´re not born; we don´t grow up; instead of dying from illness or old age we wear out like ants. Ants again; that´s what we are. Not you; I mean me. Chitinous reflex-machines that aren´t really alive. (Dick 2012, 152)

The theme of children has come up between them once before, when Deckard was testing her in the Association, and her response was violently strong then (See Dick 2012, 40). Yet she only goes on calmly now, warning Deckard about relations with an android before she invites him in bed (See Dick 2012, 153).

It is after this encounter, when they are on the roof discussing the imminent hunt of the androids, when Rachel finally voices Deckards feeling, stating that "You´re not going to be able to hunt androids any longer," and that "no bounty hunter ever has gone on after being with me."(Dick 2012, 156) exposing the actual reason why she has offered to help. This revelation strikes Deckard, who was truly thinking of ceasing his bounty hunter abilities. He decides to threaten Rachel, yet ultimately decides not to kill her, which Rachel considers as her triumph. "You realize what this means, don´t you? It

means I was right; you won´t be able to retire any more androids; it won´t be just me,"(Dick 2012, 158) she states, but doesn´t forget to acknowledge that she is not his priority. "You love the goat more than me." She thinks about the animal Deckard bought with the money acquired by retiring the androids she knew. "More than you love your wife, probably. First the goat, then your wife, then last of all–"(Dick 2012, 159) she puts Deckard´s feelings into perspective. Afterwards, it is only after Deckard has, in fact, eliminated the remaining three androids, that he hears from Rachel, who has gone to his home and killed his new goat (See Dick 2012, 179). By killing Deckard´s animal, she directly forces him to feel that his end has come (See Dick 2012, 180) as he states that "I´ll be all right, (…) And I´m going to die" (Dick 2012, 180). After which Deckard takes off from his home towards the desolated north to "the place where no living thing would go" (Dick 2012, 180). Here he eventually evaluates his present situation, stating that "I´ve been defeated in some obscure way. By having killed the androids? By Rachel´s murder of my goat?" (Dick 2012, 183) later adding that it was "Life thieves" (Dick 2012, 185) who took his goat. Despite this, Deckard does not see it as a needles act. "She had what seemed to her a reason." He comments, adding that it was "an android reason." (Dick 2012, 179) These moments mark the last appearances of Rachel, as she does not appear in the text again. The moments in which the character does, as well as those in which it does not appear in the text, mark a specific standpoint towards artificial humans, as it is precisely through these moments that different standpoints are expressed and discussed.

4.2 **Artificial Humans in The Narrative of** *Tower of Glass*

Tower of Glass features an exponentially larger number of artificial characters than *The Windup Girl*. As stated when considering artificial humans as such, however, not all of these can be considered when talking about artificial humans as defined by the specified context of this thesis. If one is talking about artificial humans in the scope of narrative though, it quickly becomes clear that there is only a single character, who embodies the focus of the text in regard to the given problematic. This character is the Alpha Thor Watchmen.

Thor begins as a devout foreman at the construction site of Krug´s tower. He is often described as the most able and dedicated of the androids, with Krug´s son commenting that Krug will "always have more real faith in his android friend Thor than he will in his own son"(Silverberg 1980, 33). Thor is also a Preserver in the android´s

faith idolizing Krug himself, which they keep secret from the humans. Despite the dire situation of androids, Thor believes that Krug will eventually free them and make them equal to humans (See Silverberg 1980, 72). His conviction guides him in moments of tension to stay faithful to Krug even throughout a crisis involving an android killing, which resulted from Thor protecting the secret of the android church (See Silverberg 1980, 66). Despite this, he eventually relents to a scheme involving a female android, Lilith, and Krug´s son, Manuel, through whom Thor hopes to move Krug to action and a hastier acknowledgement. In the time leading up to Manuel´s conversion to an android sympathizer, Thor eventually starts a secret affair with Lilith (See Silverberg 1980, 111). The situation escalates after Thor is mocked by a human and told that Krug will rebuff any political actions that could suggest android independence by "denouncing the entire android equality movement and insisting that he never would have created [androids] in the first place if he knew we´d demand civil rights" (Silverberg 1980, 140). This leads Thor to force Krug´s hand by sending Manuel to him with information on the android religion, trying to pressure Krug into releasing a public proclamation calling for full android rights (See Silverberg 1980, 160). This enrages Krug and as he calls Thor before him, starting a confrontation which leads him to visit an establishment, where the two can technologically view and experience each other's thoughts, memories and feelings (See Silverberg 1980, 166). While Krug investigates the religion within Thor, Thor watches his creator´s reaction: an utter rejection of androids. The truth of his creator´s thoughts breaks him and shatters his believes. "There is no god in this universe. There is no redemption. There is no hope"(Silverberg 1980, 170).

His will broken, Thor returns to the other androids, bearing the message that "All is lost." and that "There is no hope" (Silverberg 1980, 172). These actions lead quickly and directly to a global violent android revolt. Thor himself then goes to the construction site and singlehandedly causes the structure to collapse, standing triumphantly by a new philosophy of destruction (See Silverberg 1980, 177). When immediately confronted by Krug, Thor states that "[He] felt a sacrifice was needed" (Silverberg 1980, 180). Following this, he is attacked by Krug. Despite his rebellion against society, he is reluctant to protect himself against Krug, who eventually manages to force him into the deadly field of a transportation device. After Thor´s death, Krug escapes and all that is left on the site of the tower are ruins, Lilith, Manuel and thousands of confused androids. Thor´s story is a complicated portrait of the presented android society in *Tower of Glass*. For the most part of the story, he is led by hope for a

better future. He works in and out for the idea of freedom, and is completely devoted and consumed by it. Even when this hope is shattered, he finds it again by inspiring androids all around the world to revolt and fight. Yet at the moment of his death he is ultimately unable to abandon his initial beliefs and perished alongside the tower he helped build.

4.3 **Artificial Humans in The Narrative of** *The Windup Girl*

When talking about artificial humans as they appear in the narrative scope of *The Windup Girl* one is inherently discussing the role and character of Emiko, the Japanese-made girl slave owned by the beginning of the novel by Raleigh and made to slave in one of his less than presentable establishments. It is through Emiko that one learns not only of the nature of the artificial humans, but also of the cultural and social roles that they have been assigned within the context of the *The Windup Girl*. Even through the starting position of Emiko, it is possible to grasp the basic setting connected to the artificial humans appearing in this text, namely that they are conceptualized as things that are owned, rather than beings having their own rights. This is also the struggle one is immediately introduced to alongside the character, as "A part of her still struggles against [her humiliation] but the rest of her – (…) – doesn't have the energy to fight"(Bacigalupi 2010, 49). Emiko than goes on to slowly, throughout the text, reveal information about her past and how she ended up in Thailand, where the events of *The Windup Girl* take place.

Emiko was constructed in Japan as one of the "New People," a term contrasted to the Thai derogatory "Windup," build because "An old population needed young workers in all their varieties, and if they came from test tubes and grew in créches, this was no sin"(Bacigalupi 2010, 50). This situation is quickly contrasted with the notion about artificial humans in Thailand, where Buddhism considers them as soulless (See Bacigalupi 2010, 50). This does not, however, change the conception of artificial humans as such, as Emiko goes to describe that "New people serve and do not question"(Bacigalupi 2010, 52). This is because all artificial humans have gone through a kind of psychological conditioning, which creates an urge to serve and obey (See Bacigalupi 2010, 65). Emiko herself has to fight against this conditioning, describing it as "a genetic urge to please,"(Bacigalupi 2010, 59) and despising herself for complying with it. Emiko´s past explains more of the concepts connected with artificial humans in the context of *The Windup Girl*. She was originally a model at the disposal of a rich elite

man, Gendo, whom she always addresses with the Japanese polite form Gendo-sama. She was brought to Thailand by him as an interpreter with the help of expensive import permits, but ultimately discards her there when the cost of bringing her back to Japan turns out to be too high. Emiko comes then into the possession of Raleigh, a sex club owner, who rents her as a novelty to excited customers. The reader comes first in contact with her in precisely this setting, when she is made to describe a fruit one of her customers had given her to Anderson Lake, who is trying to search for the fruit and its origin.[33] While Anderson does take a liking to her and the two start to have a relationship together, Emiko remains in the ownership of Raleigh, until Anderson sends one of his associates into the club to celebrate a secret mutual deal. Emiko is forced to perform for the highly positioned customer and tormented in front of him and his men, until she finally snaps and violently rebels, killing her owner as well as a number of her highly ranked abusers (See Bacigalupi 2010, 367).

This single act of violence quickly grows into a full-fledged rebellion within the city, with chaos and violent conflict ultimately leading to a flood of the city and escape of many characters as well as most of the population. Emiko survives the rebellion by the side of Anderson, who ultimately succumbs to the breakout of a disease his artificial companion is immune to. In the Epilogue, Emiko is one of the only inhabitants left in the flooded city. Ultimately, she encounters a genetic engineer who describes her meeting him as "as close as anyone ever comes to meeting God"(Bacigalupi 2010, 504). The book ends with the two discussing possibilities of undoing the limitations of Emiko´s kind in the middle of the ruined abandoned city. It is thus safe to say that Emiko´s story within the narrative explores her fight against captivity, her rebellion and a possible hopeful note for the future of her kind.

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[33] See "Chapter 3" in *The Windup Girl*

5. Artificial Humans and Social Criticism

Artificial humans are creations made by men in their own image. They are the product of human evolution, are distinctly human-like, yet at the same time not human. In fact, artificial creations of men seem to always embody a number of intentional deviations, or oppositions, from the humanoid structure. The first and most significant was already designated to be the circumstance of their creation, as they are constructed in a technological, scientific manner, as opposed to the natural way in which animals or humans might be born. There are, however, many similar differences, put in place solely for the purpose of distinction between the human beings and their non-human artificial creations. One of them being, for example, the matter of reproduction. As a race that does not need to be "born" the artificial humans in the text do often contemplate the question of reproduction as a missing feature. One example of this is when the artificial model of Rachel from *Do Androids Dream of Electric Sheep?*, questioning whether her lack of reproductive organs and the possibility of bearing a child, is a loss, and asks how it feels to have a child (See Dick 2012,77). The same function is also discussed in *The Windup Girl*, where sterility is called a safety, put in place because of lessons learned (See Bacigalupi, 274). This particular statement introduces the deviations from a humanoid template as an intentional act, creating a possible failsafe in regard to the newly created existence.

In *The Windup Girl* this is presented by the android´s signature jerked movement, as well as the sterility. While these serve to passively recognize and control the members of her kind, there is one element, that was actively decided upon by the model´s creators and that is distinctive even over platforms. Her pore structure was altered, to make the android overheat following any harder physical activity (See Bacigalupi, 33). While this might not sound as a severe model alteration, the change was deliberately made as a means of control in light of other characteristics differentiating them from humans – specifically meaning: their superhuman strength and agility. It might be thus deduced that the model was made to suffer any time it would try to use the abilities that make it superior to humanity. The assumption then follows that such abilities were not welcome in the models, and that the alterations were made for the same reason as their sterility. To return control of the artificial humans and their behavior back to their creators. This clear intention within the creation of the android marks a clear perspective of the purpose the units were created for – and of the context in which they should not be used, or which should be controlled. Some of these

features might even, as one of the scientists in the text states, make the production of the units harder (See Bacigalupi, 274). This shows how very important it is for the human creators to remain in control of their creations. The artificial humans are human-like, yet never put on the same level as human beings, retaining a subservient level.

In *Do Androids Dream of Electric Sheep*? the androids are not only unable to have children, but are created without empathy, as well as a limited lifespan. Was this lifespan the result of the maximum efforts of the scientist, or is it a failsafe, guarding the humans, much like the famed bounty hunters, from those artificial creations who would defy their programming? Is the Voigt-Kampff test primarily meant to protect humans, or to threaten androids? In the given context, it is safe to say that while all the societies are set on creating a very human-like imitation, they are also determined, to very clearly differentiate it from other human beings. I would argue for this distinction to be part of the role the artificial humans portray in the context of American literature and as something that should be explored alongside it, as it clearly defines the serval role the artificial humans are to take. Yet why is this specific position of artificial humans the one single aspect that is the same across all of the chosen texts? One of such answers could be found by inspecting the role of artificial humans within the context of Asimov´s Frankenstein complex, as well as the move of science-fiction towards possible real-life scenarios. Meaning that the social issues embedded in the text inherently represent a criticism of real-life social issues. As Kevin R. McNamara maintains in his article "Blade Runner's Post-Individual Worldspace and Philip K. Dick's Do Androids Dream of Electric Sheep?" could the sole goal of this social criticism be the exploration of the American legacy of racism?[34]

5.1 Artificial Humans and Minorities

There appears to be a number of clear parallels between how the treatment of artificial humans is portrayed in American fiction, and the situation of particular minorities in the past, when their rights were still being threatened. Elizabeth Anne Leonard comments in "Race and Ethnicity in Science Fiction," that science fiction writers can use its imaginative properties to "imagine a future where [existing social] problems have been

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[34] See Kevin R. McNamara, "Blade Runner's Post-Individual Worldspace and Philip K. Dick's Do Androids Dream of Electric Sheep?" *Contemporary Literature*, 38, no. 3 (1997): 422-446.

magnified or extended,"[35] This, together with the role the androids were created in mind with, be it mining work, building, or simple service of all kind, certainly makes them very similar to a particular group of individuals in the history of humankind. In *Tower of Glass*, Robert Silverberg even introduces an elaborate comparison between black slavery and the situation of androids. Could this thus be the defining role of artificial humans? I have decided to explore this option on hand of evidence from the text, focusing on the similarities between the social context of artificial humans and certain minorities in the history of America.

One such similarity is, for example, the segregation of both groups based on their appearance. As stated before, the artificial creations are, in most cases, made to be recognizably different from the human populous, which plays a significant role in being able to recognize one´s subjects based on appearance only. The need to be recognized is a step towards a new classification, in which it could be said, that one needs to be able to be classified as something other than human, making clear, that artificial humans do not share the same roles as their creators. The conception of an artificial human as something below a regular human is something very closely related to the conception of race from the end of the nineteenth century. Ernst Heckl, for example, defines in *Natürliche Schöpfungsgeschichte* the family groups of humans, stating that the group defined as Afroneger could be conceived as something more closer to the group of a Mandrid-Babian, than to the group of an Indogerman, taking here the place of the prototypical ideal of men.[36] This conception of the Afro-American race leads to the justification of segregation, or slavery. And it was not only the so-called scientists, who were quick to justify the means of oppression of certain groups. Those following the Bible had found reason to use others as well, citing the curse of Canaan as the reason for the creation of the men of a lowly status, who were destined to serve them.[37] Both these theories are very similar to the reasoning applied to the oppression of artificial humans, leading many to think that they are, in fact, parallels. If that were true, artificial humans would be an allegory for other races. If that were true, however, it would be imperative for artificial humans to fully take over any and all such roles in the given fiction, meaning that the texts would not feature other characters fulfilling the same role,

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[35] Elisabeth Anne Leonard, "Race and Ethnicity in Science Fiction," in *The Cambridge Companion to Science Fiction*, ed. Edward james, Farah Mendlesohn (Cambridge: Cambridge University Press, 2003), 253.

[36] See Ernst Heckl, *Natürliche Schöpfungsgeschichte* (Berlin: Georg Reimer Verlag, 1868), 555.

[37] See Genesis 9:25

as well as situations similar to oppression that would not be connected to artificial humans. In other words, there would be no other minorities featured within the literary works that already contain the said allegory. This, however, is clearly not the case, as one can see in the chosen source material.

In *Do Anroids Dream of electric Sheep?* the minorities are represented by the character of John R. Isidore, whose low IQ does not entitle him to move to one of the colonies outside of Earth, and whose distorted genes classify him as special, that is, a member of the community of humans affected by the irradiated environment around them (See Dick 2012, 8). In *The Windup Gir,* a number of minorities is introduced, featuring Thai, Chinese, and Japanese characters alongside the titular artificial human, Emiko. *Tower of Glass* goes even a step further, addressing the matter in question itself with the introduction:

> Once there was a white race and a brown race, and the whites enslaved the browns. The browns were bought and sold like animals, and the laws governing their status were civil laws, property laws—an exact parallel to our condition. But a few enlightened whites saw the injustice of it, and campaigned for an end to slavery. And after years of political manoeuvring, of the marshalling of public opinion, of actual warfare, the slaves were freed and became citizens. We take that as our pattern for action. (Silverberg 1980, 55)

The comparison is then in itself quickly disputed with "The parallel's not exact"(Silverberg 1980, 55). Introducing a similar line of reasoning, which, however, creates another point of the parallel. Were the situation truly only a representation of real-life events, the solution would mirror its real-life counterpart in the same manner that it mirrors the conflict, in giving a possible peaceful co-existing solution. The outcome of *The Tower of Glass* contrasts this greatly, in having the artificial humans rebel and fight for their freedom in a very different way than that is outlined in the introduction of the problematic itself. Were the role of artificial human truly that of portraying a parallel to the real-life suffering of minorities in America, this would not be the case. As Elisabeth Anne Leonard ultimately admits in "Race and ethnicity in science fiction," most racially oriented works boil down to the representation of race within the

text.[38] Meaning that, were the point of the chosen literature truly to simply present the real-life parallel, the existence of the above given examples from the texts would be considered unrequired and would be omitted, with artificial humans taking each and every one of these character roles.

This exploration shows that while there is some evidence for this theory, there is also enough evidence against it for it to be disputed as a concept brought up by only a surface-based observation. If it is thus safe to say, that the situation of artificial humans does not function as an allegory for the situation of certain minorities in American, but rather, as described in the next chapter, seems to contrast it with its own setting, themes and motifs. The works do, however, still draw attention to possible real-life issues as means of social criticism, pointing towards a different interpretation of the role of artificial humans.

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[38] See Elisabeth Anne Leonard "Race and ethnicity in science fiction," in *The Cambridge Companion to Science Fiction,* 253-263.

6. **Artificial Humans and Dystopian Literature**

As stated previously, there is an undeniable degree of social criticism apparent in the treatment and portrayal of artificial humans in literature. While this does point towards cultural and social tendencies, I believe that the actual answer can be reached by exploring a certain genre of literature this treatment, and the roles of artificial humans, appear in. While the genre of science-fiction was already determined to be the primary topic of the chosen literature, I believe that the texts do simultaneously belong to a specific sub-genre, namely, to the genre of dystopian literature.

This is because, as Booker M. Keith maintains in *The Dystopian Impulse in Modern literature*, dystopian literature "serves as a locus for valuable dialogues among literature, popular culture, and social criticism that indicates the value of considering these discourses together."[39] Such a conception of dystopian literature would then not only agree with the level of social criticism that can be found in all of the given source material, but also with the aspects of Asimov´s Frankenstein complex, as well as the move of science-fiction towards possible real-life scenarios described by Brian Stableford.[40] Specifically then, Keith points out that it is precisely the "specificity of its attention to social and political critique,"[41] that differentiates dystopian literature from science-fiction, with which it is often associated. Bacigalupi himself addresses this issue with

> When I say science fiction, I think of classic *Foundation*, I think of rocket ships. But there´s this other tradition of science fiction, which is sort of the stealth version. It´s the stuff you see with Aldous Huxley or George Orwell, where you´re extrapolating about who are we, where are we going, what our society looks like, and I feel very connected to that strain of science fiction writing.[42]

That is in no way to say, that the texts do not, in fact, belong to the genre of science fiction. Quite the opposite. They belong to the genre of science fiction first, and to that of dystopian literature second, or to be precise, only in some of their parts, which I will explore and attempt to explain in this and the next chapter. To be able to do that, however, it is important to first state, what dystopian literature actually is, and what I mean by placing it under the scope of science fiction literature.

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[39] Booker, *The Dystopian Impulse in Modern literature,* 174.
[40] See Stableford, *Science Fact and Science Fiction*, 467.
[41] See Stableford, *Science Fact and Science Fiction*, 19.
[42] "Interview" in *The Windup Girl.*

The beginnings of dystopian literature can be traced to philosophy and Plato, yet the most relevant first real mention comes from Thomas More and his 1516 "description of a hypothetical society favorably contrasted with his own."[43] But while many view utopia as an ideal place, more intended for his satirical work to represent "no place," this initial idea of the critical conception of a hypothetical society is exactly what I elect to follow by exploring the tradition of this genre and its move towards dystopian fiction, that is, towards the critical conception of a hypothetical society of today. But why do we no longer talk about utopian literature as such? This is because utopia has become to be mainly associated with the conception of More´s text as a "good place," constructing images of ideal society.[44] As Elena Zeißler documents in *Die Dystopie auf dem Weg ins 21. Jahrhundert*, such positive conceptions of hypothetical societies took off at the end of the nineteenth century, but were eventually abandoned and replaced by Anti-utopias.[45] Booker M. Keith states, that this is because of "dystopian skepticism," explaining that "The modern suspicion towards utopian thoughts comes largely because of an intense skepticism that such dreams can ever be realized."[46] This move marks the abandonment of the nineteenth century utopia and the new emergence of dystopian literature, that is, literature that thematizes dystopian and unti-utopian ideas. While many use these two terms as synonyms, Elena Zeißler speaks about attempts to distinguish these by dividing them into an optimistic, or progressive, and pessimistic, or conservative variation of the given literary genre.[47] The first, optimistic being the dystopia, and second, pessimistic, being the anti-utopia. While I do agree with this specific division regarding the tones of the literary works, I will also still group both of these under the heading of dystopian literature. This is because dystopia and anti-utopia both share the same literary goals, settings and techniques, which makes it possible to group them both as representatives of the sub-genre of dystopian literature. But what are these goals and techniques we are talking about? What is dystopian literature?

Brian Stableford describes dystopian literature as speculations describing "hypothetical societies that are considerably worse than our own, tending towards the worst imaginable, although that extreme is hardly ever attained."[48] Booker M. Keith

[43] See Stableford, *Science Fact and Science Fiction*, 541.

[44] See Stableford, *Science Fact and Science Fiction*, 541.

[45] See Elena Zeißler, *Die Dystopie auf dem Weg ins 21. Jahrhundert* (Berlin: Tectum Verlag, 2008), 9.

[46] Booker, *The Dystopian Impulse in Modern literature*, 16.

[47] See Zeißler, *Die Dystopie auf dem Weg ins 21. Jahrhundert*, 15.

[48] Stableford, *Science Fact and Science Fiction*, 133.

states that "Dystopian fictions provide fresh perspectives on problematic political practices that might otherwise be taken for granted or considered natural and inevitable,"[49] adding that dystopian societies "are generally more or less thinly veiled refigurations of a situation that already exists in reality."[50] Thomas Moylan elaborates on this in *Scraps of the Untainted Sky* by stating that dystopian literature´s "very textual machinery invites the creation of alternative worlds in which the historical space time of the author can be re-presented in a way that foregrounds the articulation of its economic, political, and cultural dimensions."[51] According to these statements, dystopian literature is mainly viewed as means for creating hypothetical societies. Yet such conception of the genre would be almost identical to that of science fiction itself. Even Thomas Moylan agrees by stating that "Especially in the Anglo-American tradition, narratives of alienation and discovery have characterized [science fiction] from the early moments of its emergence from the sea of fantastic writing." Booker M. Keith explains this by stating that dystopian fiction "resembles science-fiction – a genre with which it is often associated."[52] But also adds that "in general dystopian fiction differs from sci-fi in the specifity of its attention to social and political critique."[53] This agrees with our conception of dystopian literature as means for explaining the degree of social criticism present in the primary literature in relation to the situations of artificial humans. But what of listing dystopian literature as a sub-genre of science fiction?

While some may argue for dystopian literature to represent a genre of itself, there are many, who like me, agree with the conception of dystopian literature as a sub-genre specific to science fiction. *The Routledge Companion to Science Fiction*, for example, lists dystopia under the "Subgenres."[54] *Cyberpsychology* elaborates on this, defining science fiction as "stories that involve discovery or application of new scientific principles, such as time travel or psionics, or new technology, such as nanotechnology, faster-than-light travel or robots, or of new and different political or social systems (e.g., of dystopia, or a situation where organized society has collapsed),"[55] placing dystopian literature into the specific sub-genre of soft and social

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[49] Booker M. Keith, *The Dystopian Impulse in Modern literature*, 19.
[50] Booker M. Keith, *The Dystopian Impulse in Modern literature*, 15.
[51] Thomas Moylan, *Scraps of the Untainted Sky* (Westview Press: Colorado, 2000), xii.
[52] Booker M. Keith, *The Dystopian Impulse in Modern literature*, 19.
[53] Booker M. Keith, *The Dystopian Impulse in Modern literature*, 19.
[54] See *The Routledge Companion to Science Fiction*, 473.
[55] *Cyberpsychology*, 92.

science fiction.[56] This is precisely because of the high degree of social criticism these works contain while electing to portray possible future scenarios. Dystopian literature could, in fact, be understood as an extension of science fiction, as it is the use of precisely these basic themes of exploration that enable and drive its intense study of critical political and social scenarios. It is then precisely this correlation of interest and literary intention that connects the two genres and allows for a harmonious union, enabling the creation of such portrayal of human society, that would allow for not only the technological wonder that are artificial humans, but also for the possible criticism connected to their social existence. While the presented evidence thus shows that most of the assumptions about dystopian literature that were made were correct, there are still other elements that should not be overlooked when talking about dystopian literature.

One of such defining elements is the setting of the chosen primary literature. This is because it is one of the defining elements of not only science fiction, but also of the dystopian genre overall, creating a basis for the unfolding plot and story elements of a given texts. According to Tom Moylan, it is precisely the setting of the text, where the primary action is.[57] This is because, as he points out, that "…sf is more concerned with the created world or produced social environment, more interested in the collective fate of the human species, exploring these concerns in a setting that while resonating with their own material realities, does not actually exist (…) in the world of its author or readers."[58] This conception of a science fiction setting is further supported by Keith, who states that „Dystopian fictions are typically set in places or times far distant from the author´s own, but it is usually clear that the real referents of dystopian fiction are generally quite concrete and near-at-hand."[59] This shows why setting is so important for dystopian literature, as it affects the way in which the readers view the storyworld overall. When talking about setting, it is also important to specify in what relation this story element stands to that of a character. This is because the reader's view of a character is inherently affected by where the setting initially places him or her, and their following interactions. Chatman explains this relationship as part of his deconstruction of narrative, combining both under the heading of existent, stating that the distinction between a character and an element of setting is "based on whether or not it performs a

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[56] See *Cyberpsychology*, 95.
[57] See Moylan, *Scraps of the Untainted Sky,* 6.
[58] Moylan, *Scraps of the Untainted Sky,* 7.
[59] Booker M. Keith, *The Dystopian Impulse in Modern literature*, 19.

plot-significant action."[60] Adding that in relation to narrative there are then "…acts or actions, in which an existent is the agent of the event, or the happening, where the existent is the patient."[61] Explaining why it is important to include setting when talking about characters and narrative. Chatman also adds that "a normal and perhaps principle function of setting is to contribute to the mood of the narrative."[62] This is important because it is precisely the mood of the narrative, which inherently determines whether one is, in the context of dystopian literature, dealing with rather a dystopian, or an anti-utopian text.

With that in mind, let us explore the different settings presented in the chosen primary literature. In *Do Androids Dream of Electric Sheep*? Dick introduces an Earth that has survived a World War called Terminus, the aftermath of which includes masses of degenerating dust, which continues to have negative consequences on the remaining population (See Dick 2012, 5). This is why most humans, who have been deemed healthy enough to do so, have already emigrated to one of the existing off-world colonies. The dust is not only harmful to humans, however, as it has eliminated most of earth´s animals. "First, strangely, the owls had died"(Dick 2012, 11). Stating that the rest of birds followed, until "…the sun has ceased to shine on Earth…"(Dick 2012, 12). Another motivation for emigration was the inclusion of receiving the possession of an artificial human. "The android servant as carrot, the radioactive fallout as stick"(Dick 2012, 12). Those who stayed had to face the degenerating fallout, and if classified as a "special," were forbidden to leave. And not only that. They were, in fact, considered "a menace to the pristine heredity of the race," and were effectively "dropped out of history"(Dick 2012, 12). The text then deals further with the artificial humans those who are willing to emigrate are granted, citing an advertisement targeting exactly these individuals, which goes:

> - duplicate the halcyon days of the pre-Civil War Southern states! Either as body
> servants or tireless field hands, the custom-tailored humanoid robot – designed
> specifically for YOUR UNIQUE NEEDS, FOR YOU AND YOU ALONE –
> given to you on your arrival absolutely free, equipped fully, as specified by you
> before your departure from Earth; this loyal, trouble-free companion in the

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[60] Chatman, *Story and Discourse,* 32.
[61] Chatman, *Story and Discourse,* 32.
[62] Chatman, *Story and Discourse,* 140.

greatest, boldest adventure contrieved by man in modern history will provide –
(Dick 2012, 13)

These artificial humans, if they escape, are precisely the individuals Rick Deckard hunts, as they are, in such a case, considered as illegal and are to be "retired". Deckard rationalizes this by thinking that "…an escaped humanoid robot, which had killed its master, which had been equipped with an intelligence greater than that of many human beings, which had no regard for animals, which possessed no ability to feel emphatic joy for another life form´s success or grief at its defeat – that, for him, epitomized a Killer." Such escaped artificial humans are then officially hunted by either specific agencies, and or, by specific police departments. In fact, the police routinely set up roadblocks and check. Officially, this is to pick up unclassified specials, but it is also to detect any illegal artificial humans that might escape to Earth. As Eldon Rosen reveals "Although naturally the public isn´t supposed to know that; they´re not supposed to know that androids are on Earth, in our midst"(Dick 2012, 42). The artificial humans, on the other hand, do dream of freedom. Roy Batty, the leader of the group of artificial humans who Deckard hunts, has his motivations described as "pretentious fiction as to the sacredness of so-called android 'life."

In the case of *Tower of Glass*, the setting is characterized by the wavering in human population, which started in the late twentieth century (See Silverberg 1980, 41). War, anarchy, social pressure and foolproof contraception are cited to be the first causes of the decline in actual population. Combined with the use of machines for all menial labor, the outcome was that "those who had no skills to contribute to the new society were discouraged from reproducing"(Silverberg 1980, 41). adding that "only those who exceeded the norms could add to the world´s stock"(Silverberg 1980, 41). Following this, and the invention of instant travel, the world became, by the end of the twenty-first century, a village, with very little difference between the appearance, attitudes, or culture of the inhabitants. But this specific society began to feel a certain shortage of laborers. Not the workers, who could be substituted by robots, but the specialized workers, like valets, baby-sitters, gardeners, or chefs. By now, the world´s sciences have advanced to the point of artificial nurturing of an embryo outside of a womb, so that mothers could avoid the risks and burdens of pregnancies (see Silverberg 1980, 42). So that the manufacture of artificial humans was only viewed as the next step (Silverberg 1980, 42). This is when Krug created the androids as tools – to serve men.

To him, they are things (see Silverberg 1980, 169). Things belonging to humans or to human organizations and agencies. The artificial humans, however, see themselves as more. Be it through the activity of their political party, or through the power of their secret religion, they all dream of a day when their status will change and when they achieve their freedom (see Silverberg 1980, 70).

The setting of *The Windup Girl* describes a world, in which cities like New York, Rangoon, Mumbai, and New Orleans have been swallowed by the ever rising sea level and where technology has turned back to spring-loaded machinery (See Bacigalupi 2010, 10). Worse yet, most of the world´s flora and fauna have been wiped out by epidemics of the ever mutating blister rust and cibiscosis (See Bacigalupi 2010, 4), and the remaining population has to battle starvation by looking towards mega corporations and their genetic reconstruction of the long lost nutrients. Yet even these powerful corporations, like AgriGen, PurCal, or Total Nutrient Holdings, are slowly running out of options. They send their agents out to search for hidden seed banks in hopes of outrunning starvation, as well as the degenerating diseases. With the decrease in population, as is the case in *Tower of Glass*, comes the creation of artificial humans.

> The Japanese were practical. An old population needed young workers in all their varieties, and if they came from test tubes and grew in crèches, this was no sin. The Japanese were practical. (Bacigalupi 2010, 50)

The "new people" the Japanese created have not just become a working, but also a fighting force in the ongoing coal wars (See Bacigalupi 2010, 154). They are made for anything and everything, their highest state being to serve their patrons well (See Bacigalupi 2010, 221). Some new people, however, do not seem to agree with this, as there seem to be places populated exclusively with windup who have escaped, and who "...don't have any patrons and don't have any owners"(Bacigalupi 2010, 67). Even Emiko, the titular artificial human of the text, dreams of freedom and of joining one of such villages. Yet it seems nearly unattainable for her, as she is not only currently owned by Raleigh, but also has expired import papers, meaning that if she were to be discovered by the city´s guard, the white shirts, she would be instantly mulched (See Bacigalupi 2010, 66).

Through this exploration of the given settings, one is able to clearly identify the similarities between the created storyworlds. Upon close inspection, one can find that they all introduce a specific vision of a future including a climatic event that changes

the society in such a manner that would support the creation of artificial humans. In fact, all of the described settings would be incomplete if the existence of artificial humans was omitted. It is then precisely this fact that points towards the immense importance these characters have within the given narratives. Specifically then, I would argue for the conception of artificial humans as an inherently dystopian feature, as it is precisely these existents, which seem to be the focus of not only the given setting, but also of the chosen narrative. To explore such a conception of artificial humans, and the possible evidence supporting or rebuking such a claim, shall be the goal of the following chapter.

7. **Artificial Humans in Dystopian Literature**

Now that we have discussed the genre and setting of dystopian literature, let us move back to the characters of artificial humans and discuss their roles in the new context created by our exploration of these themes. While the situation of specific characters in the narrative was already discussed, this chapter will more closely focus on the analysis of the given texts and the deductions one might draw from the introduced materials. This was not done earlier, because I believe such analysis could only take place after all the elements of the given works were given. That is, after the exploration of settings and characters has already taken place. This is because, as Chatman states, "Abstract narrative space contains, in clear polarity, a figure and a ground."[63] Meaning the existents that is character and setting respectively, adding that "The setting gets a character off in the usual figurative sense of the expression; it is the place and collection of objects against which his actions and passions appropriately emerge."[64] If one then considers Chatman´s conception of a character as a "narrative construct,"[65] then it follows, that the exploration of character and its roles, as is the case in this text, is only possible through the exploration of the setting and narrative which envelope and define them. To be able to determine a specific role of artificial humans as they appear in the primary literature, however, one must first collect a number of arguments towards a unified whole across the given texts, that is, to identify the elements that define artificial humans as a whole in the scope of dystopian literature. To be able to do this, let us compare the chosen texts, that is Dick´s *Do Androids Dream of Electric Sheep*, Silverberg´s *Tower of Glass*, and Bacigalupi´s *Windup Girl,* overall so as to be able to find the universal evidence pointing towards the answers we seek regarding the role of artificial humans.

First of all, let us consider the similarities uncovered by the previous exploration of the text´s settings. As stated above, all of the three texts introduce a specific vision of a future including a climatic event that changes the society in such a manner that would support the creation of artificial humans. That is not all, however, as there is a number of similarities that can immediately be explored in relation to this single concept. Specifically then, it is the literary context of this event that should be explored, as it is the key to determining why all of the given texts seem to explore the event in such a

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[63] Chatman, *Story and Discourse,* 138.
[64] Chatman, *Story and Discourse,* 139.
[65] See Chatman, *Story and Discourse,* 138.

similar way. Firstly, let us consider the climactic event itself. In the case of *Do Androids Dream of Electric Sheep*, the climactic events that transformed Earth is described to be World War Terminus. Its origin, as well as its effects are described as "…no one today remembered why the war had come about or who, if anyone, had won. The dust which had contaminated most of the planet´s surface had originated in no country and no one, even the wartime enemy, had planned on it." (Dick 2012, 11). "In connection with this a weapon of war, the Synthetic Freedom Fighter, had been modified; able to function on an alien world the humanoid robot – strictly speaking, the organic android – had become the mobile donkey of the colonization program" (Dick 2012, 12). This description shows, that when Dick is introducing the climactic event that took place, he is, at the same time, also directly introducing the situation of the artificial humans featured in *Do Androids Dream of Electric Shep*? Specifically then, he introduces the starting point for their origin, as well as the reason why their existence is, in the context of when the narrative now starts to unfold, so widespread. Their existence being, commercially as well as practically, fueled by destruction and ruin as they have become the de facto "faces" of the colonization effort.

A similar effect can be seen when viewing Silverberg´s *Tower of Glass*. Here, the androids make up the whole of the working force behind the construction of Simeon Krug´s Tower. As is the case with Dick´s colonization efforts, Silverberg represents Krug´s artificial humans as the sole means and driving force behind what is to be the on off-world communication event with the planetary nebula NGC 7293 in Aquarius (see Silverberg 1980, 16). As for the origin of the artificial humans featured in *Tower of Glass*, one might not be very surprised that the climactic event in question is described as a mixture of "War and general anarchy…" which lead to "(…) the vast reduction in human population" (Silverberg 1980, 41). This decrease in work force is eventually represented as the reason for Krug to create his androids, that is, to work and to look after humanity's needs (see Silverberg 1980, 42).

A similar approach to the creation of artificial humans can also be seen in *The Windup Girl*, where "an old population needed young workers in all their varieties…" (Bacigalupi 2010, 50) leading the Japanese to create the artificial humans as not only a work force, but also, as is the case in *Do Androids Dream of Electric Sheep?*, but also military models, fighting in wars over the dwindling resources (See Bacigalupi 2010, 154). The origin of the population´s decline is another point marking the similarities between *The Windup Girl* and Dick´s *Do Androids Dream of Electric Sheep?* In

Bacigalupi´s text, the world´s population is plagues not only by the ever-rising sea level, but also infections and diseases, which have not only led to the loss of many lives, but also to the total annihilation of Earth´s flora. In this environment, fruits that have gone extinct are brought back only through the power of genetic engineering (Bacigalupi 2010, 5). Dick works with much of the same concept, with the only difference being his focus, which he puts on animals instead of flowers, fruits and vegetables. While Bacigalupi´s world works with the lack of calories and nutrition, Dick explores the extinction of the fauna, describing owning an animal as the ultimate human goal possible. Even here there is a way to bring the lost back, however, as Dick introduces the construction of artificial animals, mirroring Bacigalupi´s genetically engineered fruits, build anew from blueprints. All of these themes connected to the creation of androids seem to be constructed in a way promoting the very same concepts and ideas.

Firstly, all of the texts include the presence of a past violent event, which had tremendous effects on not only the economy and society, but most importantly on the environment. Secondly, this event is always followed by a specific decline in population on Earth. While the reasons for this decline do differ, with Dick using colonization, Bacigalupi epidemics and the decrees in habitable space, and Silverberg social pressures and reproduction control, the effect seems to be the same: The decrease in the existing working force. It is then, that the third and most important part comes to play, as the decrees is, in all cases, followed by the creation of artificial humans. Through this observation, it can be seen that artificial humans do come into play only in those instances, when humanity is no longer able to support a fully functioning society. Artificial humans seem to always appear as a direct result of the human society to sustain itself, and function as means of helping humanity do just that. They are created so as to fill the gaps in society and help restore the failing system. This is also why they are always seem to be very quickly assigned a role within the already existing society – as this role is, at the time of their creation, obviously unfilled. Many of the artificial humans do, in fact, seem to be created with the now empty role already in mind, which seems to support the statement, why artificial humans are always introduced as a result of, and mostly not the cause of, the change of human society. When viewing the chosen primary literature in this light, it is immediately very striking, how all of the given texts seem to draw on the same themes in justifying and working towards the creation of artificial humans themselves. More importantly so, because it is precisely the act of their creation and integration into the human society, that seems to bring with itself so

many problems and hardships within all of the explored narratives. What is more, the assigned role and place of the artificial humans within society, seem to be defined by precisely these roles that they are initially given. This is why it is so important to explore and define these roles, as they are the key to understanding the different approaches, and conception, of artificial humans overall. To be able to do that, I would first like to focus on the place, position, and function of artificial humans within the given storyworld society, as these seem to be the defining aspects of the roles the artificial humans are assigned following their creation.

7.1 **Artificial Humans in Dystopian Societies**

As stated above, this chapter will deal with the place, position, and function of artificial humans within the dystopian societies represented by the primary literature. It will explore the different circumstances of artificial humans as they appear in each of the texts and attempt to find possible common characteristics. To be able to do that, let us turn towards the creation of the artificial humans as discussed in the previous chapter, where it was determined, that one of the similarities across the primary texts was the motive for the creation of artificial humans, that is, that they were created to fill a specific position in society. Their creation is thus subject to a specific goal, or function, which they are expected to perform.

In the case of *Tower of Glass*, this is described as the divide between robots and artificial humans, stating that "(…) robots made excellent street-sweepers and factory workers, but they were less useful as valets, baby-sitters, chefs, and gardeners" (Silverberg 1980, 42). This also supplies the specific positions artificial humans were expected to take within society. Consecutively, Silverberg also adds that "Krug has done that. He had offered the world synthetic humans, far more versatile than robots, who were long-lived, capable, complex in personality, and totally subservient to human needs"(Silverberg 1980, 42). This particular addition supplies important information as to the social status of artificial humans. If one considers social hierarchy, then it is clear, that these two citations point to the placement of artificial humans in *Tower of Glass* between those of robot and human. They are significantly more complex than simple machines, yet at the same time, are placed far below the level of human. A Different, previously unexplored section of the text might bring even more information regarding the matter, exploring precisely this clear line between artificial humans and humans. This is because of what Silverberg describes as "Ectogenesis." That is, "(…) the

artificial nurturing of embryos outside of womb, hatching of babies from stored ova and sperm…" (Silverberg 1980, 42) making it possible for humans to be born years after their respective parents have passed (See Silverberg 1980, 60). This is the case of the character of Spaulding, who is often contrasted to the artificial human Thor watchmen. "So far as status in the organization went, [Thor] and Spaulding were equals; neither could coerce the other, neither could accuse the other of insubordination. But the fact remained that [Thor] was an android and Spaulding was human, and in any conflict of wills between android and human, all other things being equal, the android was obliged to give ground" (See Silverberg 1980, 61). This example illustrates the clear social approach to the status of humans and artificial humans in society.

Similarly to this example, in instance where a human and an artificial human are compared can also be found in Dick´s *Do Androids Dream of Electric Sheep?* Here, the human John Isidore often interacts with a number of artificial humans and can be thus very effectively compared with them. J. R. Isidore is a special, that is, a human who has been affected by the radioactive dust, as well as a chickenhead, meaning someone who failed the minimum mental faculties test (Dick 2012, 14). This practically places Isidore below of what one would perceive to be an average human being. In terms of intelligence then, it is safe to say, he could be considered as being below an artificial human (see Dick 2012, 23). This could even be supported by the fact that Isidore seems to listen to the characters of Pris and Roy Baty, both artificial humans, and follow their commands and instruction. In practice, however, it is very clear that the artificial humans are the ones who are, at least on the social scale, below him. This can be best seen in the instances when Isidore realizes, despite his low intelligence, that his companions are indeed not human (see Dick 2012, 124) or when he is the only one left standing after the artificial humans are "retired" (see Dick 2012, 177). And it is the reason for this termination of the artificial humans that leads us to further means of exploring their status in society. This is because the reason for "retirement" of artificial humans seems to be their illegal status, that is, the fact that they have escaped, and also possibly killed their human master as well (See Dick 2012, 25). To be able to do this, however, one must have a master to begin with. This shows what the default situation of artificial humans should be, that is, that their primary goal is to be owned by humans. Rick Deckard comments on this by saying that "A humanoid robot is like any other machine; it can fluctuate between being a benefit and a hazard very rapidly. As a benefit it´s not our problem." (Dick 2012, 32) This is also explored in the moment when

Deckard recognizes Rachel to be an artificial human. Eldon Rosen, the head of the company Rachel is a part of remarks she does not need to be afraid him, explaining that "You´re not an escaped android on Earth illegally; you´re the property of the Rosen Association, used as a sales device for prospective emigrants" (Dick 2012, 47). Another human who owns an artificial human, this time as a result of emigration, comments on the situation by focusing on the dignity of it, commenting that "It's a hard thing to explain. Having a servant you can depend on in these troubled times…I find it reassuring" (Dick 2012, 14). All of these examples show, that the status of property is indeed the desired one meant for artificial humans. What is more, it is precisely this status that seems to be universal across all of the chosen primary texts. This is because, in *Tower of Glass*, the description of artificial humans directly entail the statement that "[Synthetic humans] were purchased, not hired, and by general consent they were regarded by law as property, not persons"(Silverberg 1980, 42). The text expands on this in an instance, when an artificial human is killed. In this moment, Krug reacts by giving the following commentary:

> An android´s dead. I´ll take responsibility. She said she belonged to Labrador Transmat General; Spaulding, get in touch with their lawyers (…) Notify our legal staff that Labrador Transmat has a basis for a tort action against us, destruction of android, and that we admit culpability and are willing to settle. Tell counsel to do what has to be done. Then get somebody from staff working on a press statement. Regrettable accident, that kind of thing. No political undertones. (Silverberg 1980, 66)

This part in text shows that every android, even those active in the Android Equality Party, do all have owners. Another argument for their ownership to be a part of their creation is the exploration of Krug´s final thoughts on the matter, as these can be seen when Thor decides to explore the topic within Krug´s subconscious.

> What are androids? Androids are things out of vat. Why do they exist? To serve mankind. What do you think of the android equality party? A foolishness. When should anroids receive the full rights of citizenship? About the same time robots and computers do. And toothbrushes. Are androids then such dull creatures? Some androids are quite intelligent, I must say. So are some computers, though.

> Man makes computers. Man makes androids. They´re both manufactured things.
> (Silverberg 1980, 169)

This particular statement relating the status of artificial humans to things and property is particularly powerful precisely because it is expressed by the man that invented and produces them, making it a defining argument for the status of artificial humans in *Tower of Glass*.

In the case of *The Windup Girl*, the situation is often explored on the example of Emiko. She herself, upon being offered an amount of money, states that she is "property" and "Raleigh´s" adding that "it makes no difference if I am rich or poor. I am owned" (Bacigalupi 2010, 66). Emiko even later directly elaborates on the status of artificial humans by expressing the change in her own social standing, explaining that "If she were still with Gendo-sama she would face this man. Would stand confident, protected by import stamps and ownership permits and consulates and the awful threat of her master´s retribution. A property, true, but respected nonetheless. She could even go to a white shirt of the police for protection. With stamps and passport, she was not a transgression against niche and nature, but an exquisite valued object" (Bacigalupi 2010, 153). This change in Emiko´s status agrees with what Deckard states about the standing of artificial humans, mentioning their potential benefit and hazard at the same time. It also shows that once an artificial human ceases to embody the social status it was given, it is no longer considered a benefit for society, and its existence becomes, at least in the eyes of the given societies, unnecessary. What more, after this exploration, it is safe to say, that the purpose of artificial humans across all of the chosen titles is indeed to be owned by humans, and to serve them.

Now that the default goal and function of artificial humans in dystopian society has been determined, let us focus on the means by which this goal is achieved. Since the legal system connected to the system of ownership that impacts the freedom and the social status of artificial humans was already partly discussed during our exploration of their purpose, let us now focus on different ways, in which this status of artificial humans could, and is, in fact, controlled. While discussing the aspect of ownership connected to the social status of artificial humans, it was stated that to be considered property, artificial humans have to be inherently placed below of what is considered the social status of a human being. To deploy this conception of artificial humans in practice, however, one has to be able to recognize who is and who is not human.

Meaning that were the artificial humans in question indistinguishable from human beings, this system would certainly fall quickly apart. This is why it is important to explore the exact ways, which support such a system being put into place, that is, to explore the deliberate differences between human beings and artificial humans. I say deliberate, because the analysis focuses on things that were intentionally altered during the creation of artificial humans so as to be able to enforce the constructed social system that artificial humans are being kept in.

In *Tower of Glass* this is first alluded to by "[Krug] wanted his creations to look human (aside from the necessary modifications) and to do most human things" (Silverberg 1980, 12). The fact that the modifications are described as necessary cues the subject in the text in much the same way it is framed here. This is precisely because it is through this particular assigned meaning that the text chooses to introduce the primary function of the androids. This introduced problematic is then elaborated upon later in the text, when the creation of artificial humans is explained by stating that the creation was in essence no different than that of a human in nature, but also adding that "of course, (…) we don´t follow the human genetic code in *every* aspect" (Silverberg 1980, 39). What is more, the elaboration continues by stating that "in the earliest days of android synthesis [Krug] decided that, for obvious sociological reasons, androids must be instantly identifiable as synthetic creations. Thus we introduce certain mandatory genetic modifications. The red skin, the absence of body hair, the distinctive epidermal texture, are all designed mainly for identification purposes" (Silverberg 1980, 39). This description of the creation of artificial humans is crucial precisely because it supplies the reasoning that accompanied their conception in the given storyworld. By including the sociological reasons, and the alterations crucial for the identification of artificial humans, it can surely be considered as an argument supporting the proposed theory regarding the conception of artificial humans. This is precisely because of how these alterations influence the situation of artificial humans in society, as it is primarily through these means that they are identified, enabling immediate oppression and control based on the intentional alienation of their kind from humanity. In the case of *The Windup Girl*, the alterations are best addressed in the moment when Emiko and Anderson discuss a genetic artificial creation that predates the artificial humans, namely, the cheshires, the are cat-like creatures over which their creators have completely lost their control off. "If [Emiko´s] kind had come first, before the generippers knew better, she would not have been made sterile. She would not have the signature tick-tock

motions that make her so physically obvious. She might have been designed as well as the military windups now operating in Vietnam – deadly and fearless. Without the lesson of the cheshires, Emiko might have had the opportunity to supplant the human species entirely with her own improved version" (Bacigalupi 2010. 164). The generipper, Gibbons, adds to this statement later by explaining to Emiko that "Limitations can be stripped away. The safeties are there because of lessons learned, but they are not required; some of them even make it more difficult to create you" (Bacigalupi 2010, 505). The framing of these statement directly addresses the issue of control, specifically then the ways in which the creator enforce control over the created artificial humans, as well as addressing the issue of identification, which effectively enables the oppression of artificial humans by their human creators.

The one work that deals with identification the most, however, remains to be Dick´s *Do Androids Dream of Electric Sheep?* This is because the identification of artificial humans is in Dick´s text not based on their physical appearance and limitations, but rather on a different function altogether. The reason for this is that the formal means of identification of artificial humans is quite complicated, and on multiple occasions also very much questioned. This is the case precisely because there is no immediate visual identification, and the only available sure method remains to be problematic, as the identification of an artificial human through a bone marrow analysis is not only slow and painful, but also impractical in situations of immediate danger in which the identification is the most needed (Dick 2012, 41). That is why the artificial humans are, in most cases, identified with the help of the Voigt-Kampff scale, testing for empathy (See Dick 2012, 23). This is because empathy is the only trait the artificial humans seem to consistently lack, making it, thanks to their otherwise physical perfection, the only means of identification (See Dick 2012, 24). Empathy thus serves as the main means of differentiation between who is and is not human and is at the center of the introduced social conflict. Deckard has a number of theories regarding the lack of empathy in artificial humans, until he ultimately expresses his view after learning of the attempts of an artificial human to experience it. Deckard describes the artificial human as "a rough, cold android, hoping to undergo an experience from which, due to a deliberately build-in defect, it remained excluded" (Dick 2012, 146). This confirms the deliberate nature of the creation of artificial humans and confirms the sociological reasons for their identification. It also confirms that these means, while slightly varying in execution and thematisation, are a universal matter when talking about artificial humans in dystopian

societies. But why is this even important? Why explore these sociological means and the circumstances of artificial humans, as well as their goals and functions? To help answer this, let us turn back to the exploration of dystopian literature and its social criticism. Specifically then, to the way in which dystopian literature works with social criticism and what it hopes to communicate through its discussion and exploration.

8.   **Role of Artificial Humans**

The goal and function of artificial humans in society, as well as the circumstance of their creation, were discussed in the previous chapter. Following that exploration, this chapter will focus on the role of artificial humans in the dystopian narrative overall, that is, to what specific ends the characters of artificial humans are used and what effects the use of these characters has. In this chapter, I shall present views supported by the explored and discussed materials, and propose a theory defining the role of artificial humans in American literature. To be able to do that, however, one must take into account the exploration of artificial humans as discussed in the previous chapter, as it is precisely through this exploration of these characters and the narratives they appear in, that one is able to collect enough evidence to either support, or dismiss a possible theory, as was the case with the conception of artificial humans as the representation of certain minorities. Instead of making such wild guesses regarding artificial humans, I am now able, with the help of collected data from the primary and secondary literature, to construct a much different picture of what the role of artificial humans is, and what its importance in the scope of the American literature is.

To explain, let us first consider the function and position of artificial humans in society. If one focuses precisely on this aspect of artificial humans, they are immediately reminded of such titles as *1984*, or *Brave New World*, where the individuals and their existence are controlled by a political system and its representatives, as it is precisely these dystopian portrayals of critical societies that have the greatest impact on their audience. This is supported not only by Chatman´s conception of narratives as communications from author to audience,[66] but also by the nature of dystopian literature as such, as stated by Tom Moylan, when he comments on the dialogue between audience and author in dystopian literature that "Imaginatively and cognitively engaging with such works can bring willing readers back to their own worlds with new or clearer perceptions, possibly helping them to raise their consciousness about what is right and wrong in the world, and even to think about what is to be done, especially in concert with others, to change it for the better."[67] Even M. Keith Booker comments on the connection of the impact of dystopian literature by stating that dystopian literature itself functions as social criticism in that it has an ability to "illuminate social and political issues from an angle not available to conventional

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[66] See Chatman, *Story and Discourse*, 31.
[67] Moylan, *Scraps of the Untainted Sky*, xvii.

social theorists and critics."[68] It is thus no wonder that the social criticism present draws precisely on these communications when working with artificial humans, working with the portrayals of oppressed individuals within dystopian societies, as it is often precisely this imagery of struggling individuals that allows for the exploration of harmful social systems. Similarly, the artificial humans as they appear in the chosen primary literature are all controlled by the human lead system they have been integrated in. They, as individuals and characters, have no choice over their specific situations and are effectively led to fulfill a single subservient role, for which they were effectively created and designed. This, combined with the exploration of the given narratives, agrees with what Thomas Moylan´s description of the dystopian counter-narrative, that is, a narrative of resistance, in which "(…) the "dystopian citizen" moves from apparent contentment into an experience of alienation that is followed by growing awareness and then action that leads to a climactic event that does or does not challenge or change the society."[69] The narrative of resistance is, in fact, the most popular narrative in the genre of dystopian literature. This is because it documents human struggle against society and its effects not only on the individual, but on the society as a whole, which agrees with the premise of social criticism dystopian literature is based on. At the same time, it is also the same premise the narrative of artificial humans seems to be built upon. Specifically then, it is the wish of freedom that resonates the most with the texts of primary literature. In *Do Androids Dream of electric Sheep?* it is the vision of freedom that motivates artificial humans to escape from their owners, to gain the status of illegal, and to become hunted. Deckard himself eventually asks the same question, wondering about the aspirations of artificial humans "Do androids dream? Rick asked himself. Evidently: that´s why they occasionally kill their employers and flee here." (Dick 2012, 145) The dream of freedom is, in fact, the driving force between the plots of the book, as it sets the vents of *Do Androids Dream of electric Sheep?* in motion. In *The Tower of Glass*, it is again the dream of freedom that motivates the artificial humans in their actions. First in building the titular tower, and then, after their hopes of achieving it through service are destroyed, it is the main moving force behind their rebellion, resulting in the destruction of the tower itself. In *The Windup Girl*, it is again the same sentiments that motivate Emiko to work so as to be able to afford her own freedom and to escape north, once this hope is destroyed, she rebels and sets in motion events that

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[68] Booker, *The Dystopian Impulse in Modern literature*, 182.
[69] Moylan, *Scraps of the Untainted Sky,* 148.

quickly result in a full-fledged rebellion. It seems then, that hope and freedom are as universal subjects in connection to artificial humans, as are oppression, ownership, and violence. Together, they represent the key elements of the dystopian resistance narrative, in which artificial humans substitute the role of what Moylan calls the "dystopian citizen." As such, they focus the narrative and it is through them, that the dystopian tendencies of the genre are realized. It is precisely in this way that they do not work as mere characters, but also as an extension of the genre itself.

This assumption is based not only on Seymour Chatman´s conception of characters as a set of features that combine with genres,[70] but also functions as an extension of his understanding of the narrative as a communication from author to audience.[71] It then follows that a certain conception of character can not only be the driving force behind the narrative, setting it and a number of plots into motion, but also, in itself, a realization of the genre as such. This is also why the situation of artificial humans thematises so much social criticism. After all, artificial humans are, at their core, creations made by humans, for humans, in humanity's own image. They, as well as the genre itself, represent a vision of a future not unlike ours, in which they function as the subject and the object of the narrative and the dystopian society at the same time. As such, they represent the legacy of humanity as portrayed in the chosen primary literature, as it is precisely this legacy that is connected to the creation and ultimate fate of artificial humans in dystopian literature.

8.1 **Legacy of Humanity**

When talking about artificial humans as they appear in *Do Androids Dream of Electric Sheep*, *Tower of Glass* and *The Windup Girl*, one is inherently talking about the extension of humanity. As is the case with dystopian literature as such, artificial human represent an alienated version of what humans themselves are capable of. This connection between the human legacy and artificial humans can be seen throughout this text and is, in fact, its core focus. Humans are directly linked to artificial humans, the more so, because there would be no artificial humans to speak off without humanity as such. It was humans, who created artificial humans in their own image, for their own needs, and integrated them into their own society. They are instrumental in their creation and in supplying the setting artificial humans appear in. It is in this sense that

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[70] See Chatman, *Story and Discourse,* 86.
[71] See Chatman, *Story and Discourse,* 31.

artificial humans embody the legacy of humanity by being the focus of dystopian literature. Specifically then, they embody the themes of oppression, ownership, violence, hope and freedom, and help the narrative work with these themes in creating a storyworld embodied by the dystopian literature as such. To explain this, let us again look towards the chosen primary literature, and to examine how the narrative of artificial humans work with precisely these themes, embodying elements of dystopian literature itself.

In *Do Androids Dream of Electric Sheep?* Deckard assumes a role intent on keeping the order artificial humans were placed in, that is, to eliminate those artificial humans that have decided to fight the system. This means hunting down and retiring a number of escaped, now illegal artificial humans. While doing so, he explores the nature of the artificial humans and is confronted by their motivations and will to live. Despite the inability of the artificial humans to feel empathy themselves, Deckard eventually realized he is "capable of feeling empathy for at least specific, certain androids. Not for all of them but – one or two" (Dick 2012, 113). He confronts these feeling when meeting with Rachel Rosen, but ultimately decided to fulfill his job and eventually manages to retire all of the illegal artificial humans. When he does so, however, it is revealed that Rachel killed the goat he had bought with the bounty money. After this, Rachel disappears from the narrative completely. This narrative choice might not seem strange, but when compared to the narratives of *Tower of Glass* and *The Windup Girl*, the differences become quite significant. In *Tower of Glass*, Thor Watchmen embodies the dystopian narrative of resistance by first being content with his situation, then slowly coming to explore and doubt the system around him, until he is confronted with the truth when realizing the wishes of his creator, which leads him to abandon his existing views and ultimately starts a planet wide rebellion against the humans that controlled and oppressed artificial humans. In his final confrontation with Krug, however, he relents and is ultimately destroyed, while Krug abandons the planet and leaves the fate of artificial humans to themselves. Emiko in *The Windup Girl* follows a very similar narrative scheme, starting in a situation of content and then moving from it with the help of hope towards an ultimate rebellion and the destruction of Bangkok. In the end, however, she is the one who ultimately survives and whose hopes seem to be fulfilled.

All of these narratives, while working with the same themes, embody a different aspect of dystopian literature in how they decide to frame the artificial humans at the

end of their respective narratives. While the creation of artificial humans themselves represents the legacy of violence, and the setting of oppression and ownership the human attitudes connected to social criticism, I believe, that the narratives embody the attitudes of possible hope and freedom connected to artificial humans, and by extension, to the legacy of humanity.

8.2 **The Embodiment of Hope in Dystopian Literature**

As stated a number of times before, hope is something, that is at its core, very closely connected to all three of the represented narratives, and I believe, that the biggest differences between them can be largely seen with how the texts choose to portray hope in the connection to the narrative of resistance of artificial humans. This is not only because hope is not only a chief theme connected to the legacy of humanity, but also a major theme in dystopian literature as such. In fact, although mostly skeptical, dystopian literature is concerned with social criticism precisely because it hopes to change the reality of possible real life sociological systems and problems. M. Keith Booker comments on this by stating that "Indeed, it may be that dystopian warnings of impending nightmares are ultimately necessary to preserve any possible dream of a better future."[72] Later elaborating that "Dystopian warning of the danger of "bad" utopias still allows for the possibility of "good" utopias, especially since dystopian societies are generally more or less thinly veiled prefiguration of a situation that already exists in reality. Moreover, dystopian critiques of existing systems would be pointless unless a better system appeared conceivable."[73] Even Moylan agrees with this, maintaining that "Although all dystopian texts offer a detailed and pessimistic presentation of the worst of social alternatives, some affiliate with a utopian tendency as they maintain a horizon of hope (or at least invite readings that do)…"[74] This overall agreement as to the nature of dystopian literature offers a new unexplored grounds to the study of artificial humans, as it now lends the narrative of resistance a possible new meaning by proposing a possible new motivation behind the conflict of individual artificial humans and the oppressive systems they appear in. Specifically then, it ultimately proposes a possible goal to the role of artificial humans themselves, as it is precisely through them that dystopian literature seems to embody many of its overall themes and attitudes. With that said, let us now analyze the respective narratives by

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[72] Booker, *The Dystopian Impulse in Modern literature,* 184.
[73] Booker, *The Dystopian Impulse in Modern literature,* 15.
[74] Moylan, *Scraps of the Untainted Sky,* 147.

exploring precisely this aspect of possible hope that they all seem embody.

First, let us start with the narrative of *Do Androids dream of Electric Sheep?* This is because, as it is the earlies dystopian entry, it represents the original attitudes towards not only artificial humans, but also the legacy of humanity. This can be seen by how the narrative frames the subject, focusing mainly on Deckard instead of the artificial humans themselves, having the reader learn about the human creations purely from their interactions with the human detective rather than having them be the center of the narrative themselves. While they do, by their escape and flight to earth, start the narrative off, and drive it forward by creating the conflict between themselves and Rick Deckard, they ultimately do not take part in the end of the narrative and disappear entirely before the end of the book. Similarly, the main conflict is not portrayed as that of artificial humans and the oppressive society, but that of Rick Deckard and the artificial humans, resulting in a completely different framing of the narrative overall. As such, Dick chooses to focus on the relation of humans to artificial humans rather than have artificial humans be the focus of the social commentary. Despite this major hindrance in the exploration of artificial humans is *Do Androids Dream of Electric Sheep?* still rightfully considered a breakthrough text, as it is still the first to portray the, albeit slightly altered and distanced, narrative of resistance. It does so by combining the experiences of the hunted artificial humans with the experiences of Rachel Rosen. Through Rachel, Deckard experiences the state of apparent contentment, as well as the experience of alienation and growing awareness, as Rachel makes Deckard reconsider his attitudes towards artificial humans. The actions that lead to a climactic event are also represented. This time by having Rachel be aware of the remaining illegal artificial humans. She had known of their flight to earth and worked to undermine Deckard by their hunt by making him unable to go on. When she is ultimately revealed to be unable to save the rest of the artificial humans, she decides to kill Deckards goat – and possibly even makes a point of being identified so that he would know it was her. Since the character disappears part this point, it is questionable, whether such an end to the narrative of artificial humans can be understood as a challenge, and or that change of society. While Deckard does describe Rachel´s actions as "not needles," the reader lacks explicit reasoning as to a clear interpretation. While this open assumption would agree with Moylan´s interpretation of Dick´s writing, stating that his attitudes place the

text "somewhere in the contest zone between utopia and anti-utopia, taking it to the uneasy but creative position that Dick seemed to prefer in his work and his life."[75] I believe that the personal and individual rebellions of the artificial humans in the text do not, in fact, have a lasting impact on the human society they are bid against, which means that they do not, in fact, challenge or change the presented dystopian society. This is why I believe Dick´s text falls under anti-utopian fiction rather than portraying the fully realized hopeful attitudes of dystopia.

In comparison, *Tower of Glass* places a much bigger emphasis on the situation of artificial humans than Dick´s *Do Androids Dream of Electric Sheep?* does. This is because Silverberg chooses to portray the resistance narrative of artificial humans not only from the perspective of Krug, but also from that of the artificial human, Thor Watchmen. It is through Thor that the reader is introduced to the narrative of resistance. Through the character of Thor however, the narrative is much more systematic in the portrayal of its individual stages. Featuring concrete instances that could be assigned to them, like for example the segment when Thor defends the human race and their oppression of artificial humans against the dismissive attitudes of another artificial human (See Silverberg 1980, 70). The experience of alienation and growing awareness is then marked by Thor approving Lilith Masons manipulations of Krug´s son, Manuel, in hopes of forcing Krug´s hand in acknowledging the equality of artificial humans and humans (See Silverberg 1980, 107). The final change in the character, leading to a climactic event, can then be seen in the instance when Thor finally recognizes Krug´s true feelings regarding the artificial humans (See Silverberg 1980, 169). Immediately after this, Thor kills Spaulding and with the help of other artificial humans, sends out a worldwide message that "All is lost."(Silverberg 1980, 172) effectively starting a global revolution. Thor then personally returns to Krug´s tower, which he calmly and effectively completely destroys. The text does not end here though. It continues, having Krug confront Thor in the middle of the Tower´s ruins. In the ensuing struggle, Thor is, despite knowing Krug´s views regarding artificial humans, and despite already having killed other humans, unable to raise his hands against Krug. It is due to Thor´s inability to defend himself that Krug ultimately manages to destroy the artificial human. After this, Krug moves to one of his other facilities. It is here that he faces the last challenge before he is allowed to leave Earth, as the complex has been overtaken by artificial

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[75] Moylan, *Scraps of the Untainted Sky,* 174.

humans. Despite the ongoing revolution, the present artificial humans ultimately choose to follow Krug´s instructions and help him leave Earth forever. The last chapter is, in fact, completely dedicated to the end of Krug´s narrative, and not challenge or change of society brought on by the artificial humans. This shows that while *Tower of Glass* does work with the concept of artificial humans in a much more fledged out and enriched way than *Do Androids Dream of Electric Sheep?*, it also does, at the same time, share some of its human centric elements. This is why it could be understood as either a text that appears on the verge of dystopian and anti-utopian fiction, or, as I believe is more fitting, as a dystopian fiction with undeniable anti-utopian sentiments. This is because, while it does ultimately represent the element of hope as connected to the legacy of humanity in the scope of humans themselves and not artificial humans, it also does not fail to portray the full scope of the resistance narrative of artificial humans, including the full change of society.

To put this into perspective, let us not forget the last of the three primary titles, *The Windup Girl*. Here, Bacigalupi works with the narrative of the artificial human Emiko all throughout the text. Emiko starts off by being subjected to the prescribed setting of oppression and ownership supplied by the given setting. Despite having feelings of conflict, she serves as she was taught and appears to lives in a state of apparent contentment. This changes, when she finds out about other windups living outside of human society (See Bacigalupi 2010, 67). From then on, she dedicates all her time to this hope of freedom, all the while distancing herself from the position she started out in by exploring not only the oppressive society, but also herself and her true feelings and capabilities. All this culminates in her confronting her owner, Raleigh, about her freedom to go to the windup village. When Raleigh finally angrily dismisses her hopes of freedom, she snaps, commenting that "some things are worse than dying." (Bacigalupi 2010, 367) and kills him. Following this, she continues by assaulting the man "who hurt her most," meaning the city´s regent, Somdet Chaopraya (Bacigalupi 2010, 367). By doing this, she effectively plunges the city into chaos, which results in a rebellion, followed by the destruction of the protective system of pumps and levees, flooding the entire city. Emiko is one of the only few survivors in the abandoned city. "She becomes comfortable entirely in her world of water and scavenge." (Bacigalupi 2010, 502) It is at this point, when she is finally free of the oppression, when Emiko meets Gibbons. It is at this point, that together with the generipper, hope returns to Emiko, as she is confronted with the possibility of artificial humans bearing children.

The book ends on this note, by presenting precisely this possibility in the face of human destruction. By having the book end with Emiko, it fully realizes the aspect of hope as embodied by dystopian literature, as it effectively represents Emiko reaching her dream of a better future. Contrasted with *Do Androids Dream of Electric Sheep?* and *Tower of Glass*, it is quite clear that The Windup Girl is a perfect representative of dystopian fiction, as it does not only portray the full narrative of resistance of artificial humans, but also chooses to end the narrative on this same note, not breaking it in favor of a human character. As such, it portrays the ultimate realization of the role of artificial humans by having it finally fully realized without the inclusion of the human and artificial human conflict, making it the ultimate goal of the narrative of resistance of artificial humans.

8.3 **The Role of Artificial Humans in American Literature**

The aim of this MAthesis is to analyze, determine, and explain the role of artificial humans in American literature. Throughout this text, it was determined what artificial humans are, in what kind of genres and narratives they appear, what social functions and positions they embody, and ultimately, in what way they impact the overall classification of the texts they appear in. With the help of the discussions, explorations, and the collected evidence, it is now possible to define, what the role of artificial humans truly is, that is, to define to what ends these characters are used, and why no other type of character could be used to portray this specific role, and, what the importance of this role is. Firstly, it was very early on resolved, that the role of artificial humans is always very closely related to that of humans and humanity. Even the used definition of artificial humans refers constantly to humanity, stating that an artificial human is an entity that in its form and cognitive abilities as well as its components, imitates a human being. When exploring the setting artificial humans appear in, it was always determined by humanity, as artificial humans appeared as things build by humans for humans, to be integrated into their society and to function as their property. The narratives of artificial humans then derive from precisely these social states and functions, bidding them against the constructed system in what is described as the narrative of resistance, seeing artificial humans move from their apparent contentment into an experience of alienation, followed by their exploration and growing awareness of the oppressive environment, inciting action that leads to a climactic event that does or does not challenge or change the society artificial humans appear in. As stated in the

previous chapter, it is then precisely these climactic events connected to the narrative of artificial humans that ultimately express the attitudes of the given works, effectively acknowledging the significance of artificial humans within the texts.

This is why I believe the role of artificial humans to be the portrayal of the legacy of humanity other than its own existence. The conception of artificial humans as a focus for human legacy other than its own is supported not only by the defining feature of dystopian literature, that is, to represent altered version of reality as a basis for social criticism, but also by their obvious impact on the nature of the presented attitudes connected to the state of the narrative of resistance artificial humans embody. It is precisely in this way that the characters of artificial humans influence the narrative by being put into contrast with the constructed human society and thus embodying an alienated perspective, realizing social attitudes expressed in the texts themselves. As such, artificial humans help document approaches to possible future human crisis. It is precisely in this way then, that they help educate and engage the reader, making them aware of the social criticism present in the works. Such realization of social tendencies can be for instance seen in the attitudes of the presented dystopian literature, in which *Do Androids Dream of Electric Sheep?* represents the earliest pessimistic existential view of a possible future society, *Tower of Glass* the later, altering attitudes of transforming society, and *The Windup Girl* the very modern social distance connected to the emergence of post-humanist tendencies.

These genre differences appear in correspondence to the way in which each of the presented narratives of resistance is realized, drawing not only on the artificial characters themselves, but also on the overall themes connected to these characters in the works overall. It is precisely in this way then, that each of the texts allows for a slightly different kind of criticism, as they each focus to explore the characters and narratives of artificial humans in their own specific way, expressing each work´s attitudes towards not only artificial humans as such, but to the portrayed societies and storyworlds as such. In *Do Androids Dream of Electric Sheep?* for example, artificial humans often take on roles corresponding to the tendencies of humanity. First they start of as soldiers, responding to the violence and destruction humanity has brought on with their wars, but later, when the fighting ceases, become the main means of the colonization efforts. It is only after the function of this role fails them, locking them into systematic oppression, that they revert to the only thing they know, that is, violence. The actions of artificial humans in *Do Androids Dream of Electric Sheep?* are, in fact,

portrayed as the equivalent of human actions, only devoid of the corresponding emotional response. It is in this way, that humanity is basically confronted with its own actions, and even then, the direct response to this confrontation is again, the will to eliminate it. In this case, the answer to the question of the legacy of humanity other than its own existence is violence and destruction. It is a vicious circle leaving only more and more carnage in its way, because the original reason for the emergence of violence is never really addressed and is only discussed on the basis of the relationship between humans and artificial humans, as it is precisely this that the main conflict of the book seems to focus. As such, it is precisely this conflict that utilizes the theme of violence the most, building it upon the assumption that if one is human, it is forbidden to kill them, but that if one is and artificial human, then such actions are inherently allowed. In this storyworld, the narrative of oppression has no real denouement other than the failing of humanity, that is, of Deckard. This is because artificial humans have only two choices. They can either live in oppression, or attempt to kill their masters and escape, which directly leads to them being hunted so that they can be killed. "You shall kill only the killers" (Dick 2012, 24) states the text, making it possible for Deckard to eliminate androids without violating the rule of life, stating that for him "an escaped humanoid robot, which had killed its master, which had been equipped with an intelligence greater than that of many human beings, which had no regard for animals, which possessed no ability to feel empathic joy for another life form´s success or grief at its defeat – that, for him, epitomized The Killers" (Dick 2012, 25). After successfully eliminating six of the escaped artificial humans, Deckard is only made to feel the impact of his actions by Rachel´s murder of his goat. It is at this moment that violence comes full circle and Deckard is finally at the receiving end of the direct impact of his actions, and is finally able to assess the situation, questioning it, as he eventually voices to his wife that "After I finished. I couldn´t stop because there would be nothing left after I stopped." (Dick 2012, 192) and asking "Do you think I did wrong? (…) What I did today?" (Dick 2012, 192) finally raising the issue of consequence as such. Despite this, the issue is never really raised in connection to the artificial humans themselves, but rather as a central idea regarding mainly humanity and its own response towards such an overall legacy. This is why *Do Androids Dream of Electric Sheep?* can be understood as anti-utopian fiction, drawing on the role of artificial humans only as means of exploring humanity´s own tendencies and attitudes. While *Tower of Glass* is inherently an also human centric piece, its treatment of these themes of violence and control is much different from that

expressed in Dick´s novel.

This is because the legacy that is explored in *Tower of Glass* is not mainly that of violence, but that of oppression and control. As an artificial human reflects upon the level of control humans impose upon them: "By what right does one human enslave another? But our masters *made us*. We owe our whole existence to them. They can do as they please with us; that´s why they brought us into being. We have no moral case against them." (Silverberg 1980, 72). That said, it is also important to note that Thor Watchman does, in fact, wish for freedom, and only complies with his master´s wishes under the presumption that such redemption will eventually be possible. Krug on the other hand, exercises power without thinking about the nature or thoughts of his creations, assuming their submission is an automatic response and not subject to any change. His failure to realize the true power struggle, and the revelation that he is not the only person upon whom the situation is dependant, eventually lead to the loss of control over all artificial humans. Following this, Krug decides to escape, removing himself from the aftermath and the consequences of his actions. "Krug has turned his back on Earth. He knows that if he looks out, he will see the fires that are blazing in every city tonight, and he does not want to see that; the only fire that concerns him now is that fiery ring in Aquarius" (Silverberg 1980, 184). By leaving Earth behind, he relinquishes power to his own creations, virtually abandoning any responsibility in the process, making his own fate dependant on the actions of others. While not specifically cantered on artificial humans, the outcome of the text does choose to portray the change of society that is representative of a successful narrative of resistance. In contrast, it is clear that the climactic event featured in *Do Androids Dream of Electric Sheep?* does not, in fact, change the society. Much like Dick, however, Silverberg also chooses to portray a very human centric view of the problematic, by not providing the eventual outcome of the climactic event itself, only choosing to portray the vent itself, providing the reader with the option of supplying his or her own assumptions regarding possible following events. On the other hand, Bacigalupi chooses to portray not only the climactic event itself, documenting the fall of the city as well as the fate of its population, but also the ultimate fate of Emiko. As such, he does not only focus on the successful completion of the narrative of resistance, but also on the legacy of hope, as Emiko gains the opportunity to directly influence all future generations of artificial humans.

It is precisely through these uses of artificial humans that the texts manage to

express their overall themes and attitudes successfully, drawing on the literary tradition of not only the genre of dystopian literature, but also of science fiction. It is their portrayal within the narrative under the oppression of humanity that allows for the presence of direct social criticism aimed at the reader, so as to express concepts and ideas that encourage critical and independent thought, limiting possible given interpretations of the works and highlighting the chosen problematic, that is, the threat of possible future human crisis, and the exploration of human legacy as expressed by the use of artificial humans.

9.   Conclusion

The aim of this text was to analyze, determine, and explain the role of artificial humans in American literature. It set out to not only define the of role artificial humans, but to also document and clarify the effects of their use, as well as the environment in which they appear. It is to this end that the problematic of artificial humans is first introduced by an exploration of the American tradition of science fiction, documenting their development from mythical, to technical scientific beings as portrayed by Čapek, Asimov, and Dick, as well as mentioning their wide use in current multimedia. It is on this basis that the text introduces, with the help of Brian Stableford, the genre of science fiction, exploring it as means for discovery and scientific principle, documenting its development in the last century from the form of short fiction to novel, and from space travel back to humanity, and, in extension, to artificial humans. Artificial humans are then introduced with the help of Asimov´s Frankenstein complex, human antipathy against machinery. Discussing artificial humans in American literature, the text then introduces three literary works dealing with artificial humans, namely, Philip K. Dick´s *Do Androids Dream of Electric Sheep?* Robert Silverberg´s *Tower of Glass* and Paolo Bacigalupi´s *The Windup Girl*, which all serve as basis for the following exploration and analysis.

With the source material for the text established, the study moves on to explore and define artificial humans themselves. It begins with a clear exclusion of virtual and human entities, that is, virtual and artificial intelligence, as well as cyborgs, electing instead to discuss artificial humans in relation to robots and androids, and to the terminology that can be found in the chosen primary literature. With the help of secondary literature, the term artificial human is eventually coined as denoting a human creation, which with its form, cognitive abilities, and its components, imitates a human. Meaning that to be considered an artificial human, the said entity must possess a physical form identical to, or closely resembling, a human; cognitive abilities complex enough to imitate and interact with human behavior, and be created not of mechanical, but rather of biological, living matter. This coined terminology is then applied to the chosen primary literature so as to be able to determine whether they conform to the overall definitions of artificial humans, but also to be able to illustrate and explore the different approaches that the texts employ to differentiate between an artificial human and a human being. It is through this study the text determines that the coined definition of an artificial human is identical with the label of an android as used by Dick in *Do*

Androids Dream of electric Sheep?, as well as proving that the artificial humans featured in the chosen primary literature, so all meet the requirements of the given definition and are to be considered as a valid example of artificial humans.

With the terminology of artificial humans established, the text then moves on to the exploration of specific artificial humans within the chosen literary narratives by focusing on specific characters, exploring not only the narrative of artificial humans as such, but also the narratives that they populate, as well as the themes and motifs they can be associated with within the given texts, as well as their overall conception. This exploration of artificial humans is supported by Seymour Chatman´s conception of characters and narrative, as the text attempts to ultimately define the role of artificial humans through the use of a character within narrative. It is precisely to this end that the text focuses on the character of Rachel Rosen in *Do Androids Dream of Electric Sheep?* Thor Watchmen in *Tower of Glass*, and Emiko in *The Windup Girl*, constructing a basis of similarities as well as differences between the three primary sources, as well as examining the environment in which each of these characters appears. The text places special emphasis on those instances, in which the attitudes towards artificial humans are overtly expressed, focusing thus not only on the narratives themselves, but also on other parts of texts that set these narratives in motion, drive them forward, and influence them. The result of this exploration of artificial humans in narrative is the finding that all the primary texts draw attention to specific social issues as means of expressing a high degree of social criticism, narrowing the possible interpretations of the role of artificial humans to one inherently dealing with such issues.

With the basis for the determination of the role of artificial humans established, the text then goes on to address a popular opinion connected to the high level of social criticism present in the narratives of artificial humans, exploring the option whether the role of artificial human could be the portrayal of real-life racial issues. While plausible in theory, this assumption of seeing artificial humans as tools for exploring the situation of certain minorities in America falters when confronted with close examination and evidence from the source material, and is eventually dismissed on the basis of racial representation in the works themselves. A different theory is then proposed as the reasoning behind the high degree of social criticism present in the primary literature, viewing this as an indicator of the possible presence of certain aspects of dystopian literature. It is for this reason the text sets out to explore dystopian literature so as to be able to understand its importance in the connection to artificial humans. With the help

of Booker M. Keith, Brian Stableford, Thomas Moylan, and Elena Zeißler, the text explores the differences and similarities, and the relationship between dystopian and science fiction literature, focusing on their exploration of possible future earth-like scenarios, eventually establishing dystopian literature as a sub-genre of science fiction. The text then moves on to dystopian literature as such, exploring the classification of different types of fiction according to the presented degree of social criticism and the work´s expressed attitudes, ranging from utopian fiction through anti-utopian tendencies, to dystopian fiction. To prove the proposed presence of dystopian themes, the text then applies the explored theory to the chosen primary literature, uncovering common dystopian themes in the settings, as well as the narratives themselves, pointing out important clues to the conception of artificial humans as a whole.

   The characters of artificial humans are then explored in the new context of dystopian literature, setting a solid ground for a final discussion regarding the role of artificial humans by exploring their existence in dystopian societies, focusing on the means and forms of oppression and control the artificial humans are subjected to, as well as exploring the effects such environments have on the characters themselves. This study combined with the theory of Seymour Chapman eventually leads to the exploration of Tom Moylan´s so-called narrative of resistance in dystopian literature. Based on all the previously explored theory and evidence from primary literature, I then propose a theory placing artificial humans into the role of Moylan´s dystopian citizen, which sees artificial humans move from their apparent contentment into an experience of alienation, followed by their exploration and growing awareness of the oppressive environment, inciting action that leads to a climactic event that does or does not challenge or change the society artificial humans appear in. The theory sees Moylan´s narrative of resistance as means of embodying the role of artificial humans in dystopian literature, as it is through this narrative that artificial humans are able to effectively focus and combine with the given genre of dystopian literature, as well as science fiction, by contrasting the constructed human societies and thus embodying an alienated perspective, realizing social attitudes and criticism expressed by the texts themselves. This is why the narratives of artificial humans also reflect, as well as help to realize, the tendencies of the texts themselves by documenting approaches to possible future human crisis.

Based on the exploration of narratives, characters, settings, social criticism, and dystopian literature, I ultimately propose that the role of artificial humans in American

literature is to portray the legacy of humanity other than its own existence. Be it violence, oppression, or hope, artificial humans focus the attitudes connected to the state of the narrative of resistance, moving past a localized interpretation, helping readers uncover deeper and more complex themes within the given literary works, as it is precisely this exploration of thought that motivates the creation of dystopian, as well as science fiction literature.

In conclusion, it is thus safe to say that the text succeeds in its analysis, explanation, and determination of the role of artificial humans in American literature only through the exploration of dystopian literature. The text also documents and clarifies the effects of the use of artificial humans in literature, and comments on the false conception of artificial humans as means for the portrayal of real-life racial issues. The text also establishes and documents the environment in which artificial humans appear, as well as some of the tendencies connected with this portrayal, and the attitudes these tendencies portray. Lastly, I propose a possible follow up study dealing with the connection of the portrayal of artificial humans in dystopian literature to the emerging post humanist tendencies of current science fiction literature. Another possibility of how to approach artificial humans would be the exploration of female artificial human characters and the tropes connected to their specific narratives in comparison to the narratives of male artificial humans.

Summary

Tato práce se věnuje problematice postavení umělých lidí v rámci americké literatury. Klade si za cíl prozkoumání a vymezení úlohy umělých lidí a jejich prostředí. Práce nejprve představuje problematiku umělých lidí v kontextu populární kultury, načež přechází k tradici americké vědeckotechnické literatury. Následující část podává základní informace o třech literárních dílech zabývajících se umělými lidmi, jež slouží jako základ následné studie a zkoumání. Konkrétně se jedná o tituly: *Sní androidi o elektrických ovečkách?* Philipa K. Dicka, *Věž ze Skla* Roberta Silverberga, a *Dívka na klíček* Paola Bacigalupiho.

Po představení předmětu a cílů práce text přechází ke studii samotné. Nejprve se věnuje problematice definice umělých lidí v rámci používaných vědeckých termínů jako umělá inteligence, kyborg, robot, nebo android. Vymezuje umělé lidi jako lidské výtvory, které své tvůrce imitují jak fyzickou formou a psychickými možnostmi, tak svými komponenty, jež jsou z pravidla biologického původu.

Práce se následně zabývá konkrétními postavami umělých lidí z pohledu naratologie. Využívá této metodologie k přezkoumání předpokladu, že zobrazení umělých lidí je reprezentací současných a historických rasových tendencí, a na základě podrobné analýzy narativní funkce postav umělých lidí tento předpoklad vyvrací. Na druhé straně analýza odhaluje přítomnost sociální kritiky, a proto navrhuje zkoumat tematickou roli umělých lidí v kontextu dystopické literatury.

V návaznosti na to se práce zabývá historii jak dystopické literatury, tak jejím vztahem s vědeckofantastickou literaturou, stejně jako žánrovým posouzením primárních textů. Po zkoumání jednotlivých aspektů vyprávění se text ubírá k analýze způsobů, jakými primární literatura s tímto spojením postav umělých lidí a dystopické literatury pracuje. Jako jeden z hlavních aspektů práce je pak vnímáno představení Moylanova konceptu dystopického občana a souvisejícího narativu odporu, jenž umělí lidé v rámci dystopické literatury přebírají a přetvářejí v nástroj sloužící k realizaci a tematizaci jejich vlastních cílů a možností, které kontrastují s vnímáním člověka jako hlavního aktéra sociální kritiky.

Práce končí vysvětlením zpracovaných motivů rozličných odkazů lidstva, pracující s dystopickou tematizací násilí, útlaku, a naděje. Výsledkem zkoumání je zjištění, že úlohou umělých lidí je zobrazovat odkaz lidstva jiný, než je jeho vlastní existence. Toto zjištění je poté porovnáváno s motivy jak dystopické literatury, tak vědeckofantastické literatury, a konečně potvrzeno jako teorie odpovídající motivům

jak obou žánrů, tak primární literatury, a poskytnutému zpracování umělých lidí jako takových.

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Annotation

Annotation: The aim of this text is to analyze, determine, and explain the role of artificial humans in American literature. It will attempt to not only define the role artificial humans portray, but to also document and clarify the effects of their use, as well as the environment in which they appear. This will be done with the help of three novels dealing with artificial humans, namely Philip K. Dick´s *Do Androids Dream of Electric Sheep?* Robert Silverberg´s *Tower of Glass* and Paolo Bacigalupi´s *The Windup Girl*.

Anotace: Tato práce se věnuje problematice postavení umělých lidí v rámci americké literatury. Klade si za cíl prozkoumání a vymezení úlohy umělých lidí a jejich prostředí. Základem studie a zkoumání jsou tituly *Sní androidi o elektrických ovečkách?* Philipa K. Dicka, *Věž ze Skla* Roberta Silverberga, a *Dívka na klíček* Paola Bacigalupiho.