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Incorporating Robots into Human Law – An Analysis of Robot Prototyping in Ridley Scott's *Blade Runner* and Alex Proyas' *I, Robot*

Abstract. Science fiction narratives have not only influenced the way the majority of people imagine the future, but they have also shaped the general expectations for the technological development. This phenomenon has been called “science fiction prototyping” by Brian David Johnson. The prototype of a robot is created by science fiction works. Robots as artificially created entities are often presented as potential “members” of future society. Therefore, their legal status in imaginary reality is worth considering.

The analysis of *Blade Runner* (1982) by Ridley Scott and *I, Robot* (2004) by Alex Proyas juxtaposes features that, according to the legal tradition, are most often attributed to moral subjects of legal protection with human-like features of robots. The interdisciplinary approach adopted in this study involves applying legal reasoning to the study of science fiction.

Keywords: science fiction prototyping, robot ethics, robot rights, law, AI

1. Introduction

The urging dilemma that contemporary Western societies face is connected with a place of new technologies in legal reality. The development of bioengineering, robotics and computing has enabled a creation of artefacts that are becoming gradually more independent. Self-driving vehicles, social robots, medical robots or even intelligent domestic de-

vices are able to make independent decisions that, on the one hand, enhance and improve the quality of people's lives but, on the other hand, can pose a threat to them. Lawmakers and legal theoreticians have been considering the issue of liability for robots' wrongdoing, intellectual property rights protecting products made by machines, automatic data processing and other legal matters relating to artificially created automata's activity. The vision of the development of humanized AI that aims at erasing the gap between robots and humans complicates the issue of legal status of robots even further as it touches upon the area of law that has always been reserved for humans only, namely human rights law. This branch of law takes its fundamental assumptions from the natural law – and in this context the word natural is not without significance. It is due to the nature of human beings, their exceptional features and inherent qualities that people take special place in the environment, also the legal one. However, the environment may become inhabited by a new kind of creature which, or who, resembles a human being in terms of characteristics that in the legal tradition have been considered human-like only. Even though robots are artificially created their significant intellectual, social and cognitive potential force us to consider them as "members" of future society who, owing to their features previously attributed only to moral subjects of legal protection, call for special protection, even equated to that of fundamental rights.

The aim of this article is to identify features that are considered to prove the uniqueness of humans when compared to non-humans and verify whether those features could ever be found in robots. From the legal perspective identifying exclusively human features in robots can serve as grounds for extending human rights to those artificially created entities. As the subject is highly futuristic the analysis would be based on two science fiction films which display the development of the current technological status quo without being detached from both legal and moral reality.

2. Science fiction prototyping

The idea of exemplifying legal reality through imaginary science fiction narratives stems from the phenomenon called "science fiction prototyping" which treats science fiction texts as sources of information about the future worlds. The notion was coined by Brian D. Johnson and has been used to describe science fiction's ability to influence the development of new technologies. Images of robots that function in the collective imagination of contemporary society have been to a great extent the results of how robots have been presented, characterised and described by science fiction books and films. Neil M. Richards and William D. Smart (2016) claim that the majority of people construct their projections of robots on what they have seen in the products of popular culture (5). Furthermore, popular culture creates a market demand for a robot with specific characteristics, functions, appearances, etc., that engineers and developers want to satisfy. As a result, the newest technology is constructed around imaginary science fiction. Science fiction in a way shapes the future and, as Johnson (2009) claims: "The

future and science fiction have mingled together in our education and imaginations to such a point that there is no better medium to use as a platform for fictional prototyping" (5). Contrary to the understanding of a prototype as one of the stages in a design process or as a real object, Johnson (2011) perceives it as "the story or the fiction about the thing" (12). It is a work of imagination, a fictional representation of a product, "an example, a rough approximation of the thing we hope to build one day" (Johnson 2011, 12). Hence, science fiction prototyping does not provide a ready-made recipe for the future but rather presents different alternatives within which one can test and explore different scientific, but also legal, scenarios.

Seeking legal answers to future societal problems is a common theme in science fiction. Science fiction does not only display humans' attempts to find legal solutions that would protect the humanity against robots, but it also presents the robots' struggle for legal recognition. The legal issue raised by the two films in question is presented by other works of science fiction as well. For instance, in *Bicentennial Man* (1999) the protagonist – a household robot – issues a petition to the World Congress to be recognized as a human so that he has the same rights to be married. Also, the episode "The Measure of a Man" (1989) of the *Star Trek: The Next Generation* TV series considers the rights of artificial intelligence – during a courtroom proceeding it is established whether the android Lt. Data is a mindless automaton or a sentient being. Those examples show that law has penetrated into the imagined worlds of science fiction. As a response, science fiction has ricocheted and entered the legal considerations of robot rights serving a valuable prototypical function in legal studies.

3. Definitions of a robot

The word *robot* was used for the first time to denote an artificially created human-like creature in a Czech play from 1920 entitled R.U.R (*Rossumovi Univerzálni Roboti*) by Karel Čapek. Since then the term has adhered to products of technological development whose purpose is to serve people in various areas of their lives. The multiplicity of functions and characteristics of robots makes it difficult to provide one, comprehensive definition of such a complex notion. Dictionary definitions seem to narrow down the functions of a robot to automaticity and imitating of human-like behaviour. The *Oxford English Dictionary* (2019) defines a robot as: "1. a machine that can perform a complicated series of tasks automatically; 2. (especially in stories) a machine that is made to look like a human and that can do some things that a human can do". According to *Merriam-Webster Dictionary* (2019) a robot is: "1. a machine that resembles a living creature in being capable of moving independently (as by walking or rolling on wheels) and performing complex actions (such as grasping and moving objects), 2. a) device that automatically performs complicated, often repetitive tasks (as in an industrial assembly line), b) mechanism guided by automatic controls [...]." Scholars who deal with robotics and robot ethics draw the attention to the robots' ability to re-

ceive stimuli from the environment, and react and interact with the outside world. Former AI Laboratory director at Stanford, California, Sebastian Thrun, claims that robots are machines which are able to “perceive something complex and make appropriate decisions” (Singer 2009). Ming Xie (2003) states that a “humanoid robot” is “a physical agent, capable of self-developing its mental and physical capabilities through real-time interaction with the environment and human masters” (14). However, for the purpose of this analysis the definition by Alan Winfield (2012) will be applied which reads that a robot is “an embodied artificial intelligence”. Condense but, at the same time, broad, the definition underlines all three exceptionally vital features of a robot which are: artificiality, intelligence and embodiment. The latter aspect is often used to visually enhance the similarity between robots and human beings as android robots are designed not only to act but also to look like humans.

4. Moral agent qualities

The futurologists, AI specialists, robotic engineers and designers as well as science fiction authors and directors share a stance that robots may progress to such an extent that their capabilities would equate or even exceed those of human beings. Created to mimic human behaviour, robots may, just like humans, be one day identified as moral subjects – entities that can have and enjoy rights. Special legal protection is granted to humans because they display features that, according to the legal tradition, are most often attributed to moral subjects of legal protection. To claim the robots’ eligibility for such a protection means to identify those features in robots.

One of the capabilities necessary for legal recognition is intelligence. It is a feature that humans define themselves by. As Stuart J. Russell and Peter Norvig (2016) explain, “Humankind has given itself the scientific name homo sapiens – man the wise – because our mental capacities are so important to our everyday lives and our sense of self” (3). Hence, according to Robert Sparrow (2012), an intelligence at a human-like level creates a moral obligation towards artificial entities: “What are our obligations to such entities; most importantly, are we allowed to turn off or destroy them?” (301). A different view is presented by Ben Goertzel (2019) who claims that intelligence alone does not indicate a moral entity: “The ‘artificial intelligence’ programs in practical use today are sufficiently primitive that their morality (or otherwise) is not a serious issue. They are intelligent, in a sense, in narrow domains – but they lack autonomy; they are operated by humans, and their actions are integrated into the sphere of human or physical-world activities directly via human actions” (1). If robots are only intelligent and they lack autonomy, their moral claims are invalid. In such a case, robots are conceptualized only as tools controlled by humans or, in other words, instruments of human action. Yet, another scholar reverses the inter-dependence of those two concepts. According to Robert van den Hoven van Genderen (2018), intelligence is a key component of autonomous action: “For autonomous thinking there is also the need

for intelligence. This aspect is also often used to determine the humanlike behavior, needed to determine the determination of a human and therefore a natural person" (27). Van den Hoven van Genderen (2018) narrows down the scope of abilities which fall into the category of intelligence: "Without going into the attitudes that exist about the many forms of intelligence, I would limit this reference to the intelligence needed to participate as an individual in society" (28).

Artificial intelligence embodied in machines raises many philosophical questions. Scientific literature distinguishes strong and weak artificial intelligence. The former entails a belief that robots would understand the outside world through cognition, the latter "assumes that machines do not have consciousness, mind and sentience but only simulate thought and understanding" (Hildt 2019). Hence, the question concerning robot rights would be raised only with regard to the strong AI within which sentience and consciousness is not simulated but independent, real, human-like.

According to Amadeo Santosuosso (2016) "the theoretical possibility to have consciousness (or at least some conscious states) in machines and other cognitive systems is gradually gaining more and more consideration" (231). As the scholar continues, "assuming that even an artificial entity may have a certain degree of consciousness would mean that, despite its artificiality, such entity shares with humans something that, according to the legal tradition intertwined into the Universal Declaration of Human Rights, is considered an exclusively human quality. That is a matter of human rights or, better, of extended human rights to machines" (204). The necessity to incorporate conscious machines into law is also discussed by David Calverley (2005). He states that, "At some point in time the law will have to accommodate such an entity, and in ways that could force humans to re-evaluate their concepts of themselves. If such a machine consciousness existed, it would be conceivable that it could legitimately assert a claim to a certain level of rights which could only be denied by an illogical assertion of species-specific response" (82). The development of conscious machines would then revolutionize legal systems which express a human's superiority over other entities.

Also, the idea to protect sentient non-humans leads to equating of the rights of man with other species. Considering the discussions on animal rights, the majority of people claim that the ability to perceive and feel is sufficed for an entity to be incorporated into a moral discourse. As Christian Neuhäser (2015) states, "many people believe that all sentient beings have moral claims" (133). The vision of sentient robots is discussed by Seo-Young Chu (2010) who understands sentience as "possessing human attributes such as selfhood, the capacity to fall in love, and susceptibility to grief" (214). The existence of sentient artificial entities would evoke a range of questions of moral and legal character. Chu asks "What kinds of moral claims might such a creature have on us? Should a sentient robot be entitled, for example, to freedom of thought, conscious, and speech" (214)?

Investigating science fiction reality provides us with answers to questions raised about the validity of recognizing robots as moral agents of legal protection. The considerations are based on the proximity of features displayed by robots to inherent

and distinctive features of humans. The analysis of science fiction visions constitutes a point of reference to the discussions concerning the future of law and the possible necessity of reconsideration of human rights legislation.

5. *Blade Runner*

The film *Blade Runner* was directed in 1982 by Ridley Scott and is set in cyber-punk Los Angeles of 2019. It tells a story of Rick Deckard whose job, as of the eponymous blade runner, entails pursuing and terminating, or as euphemised in the film retiring, bio-engineered humanoids known as replicants. Those synthetic humans are produced by the Tyrell Corporation to perform slave labour in colonies outside the Earth. The most advanced Nexus 6 replicants rebel and a group of humanoids return to Earth. They are considered a threat to human society and have to be hunted down and destroyed – the task is reluctantly undertaken by Rick Deckard. The Voight-Kampff test is developed to determine replicants' identities since it is extremely difficult to distinguish them from humans. The test measures bodily functions that are triggered when an individual feels empathy – allegedly replicants are not able to develop emotional responses so they do not react to the test in a proper, human-like way. As it becomes evident while the plot unfolds, replicants progressed to such an extent that the boundary between them and people is almost entirely blurred. Albeit, the film starts with a clear separation of humans and replicants:

Early in the 21st Century, THE TYRELL CORPORATION advanced Robot evolution into the NEXUS phase – a being virtually identical to a human – known as a Replicant... The NEXUS 6 Replicants were superior in strength and agility, and at least equal in intelligence, to the genetic engineers who created them. Replicants were used Off-world as slave labour, in the hazardous exploration and colonization of other planets. After a bloody mutiny by a NEXUS 6 combat team in an Off-world colony, Replicants were declared illegal on earth – under penalty of death. Special police squads – BLADE RUNNER UNITS – had orders to shoot to kill, upon detection, any trespassing Replicant. This was not called execution. It was called retirement.

Replicants, although equipped with capabilities greater than those of their creators, are still treated as property. Artificially created humanoids are slaves who perform life-threatening jobs connected with space exploration. The disrespect for their existence is also evident with regard to imposing penalty upon them. After the replicants' rebellion they are considered illegal and sentenced to death without any trial. As Shulamit Alomg (2014) notices, "The enslavement and sometimes killing of the Replicants is represented not as defensive acts but as a plain manifestation of force, as crude violence backed by invisible law" (167). Using the Voight-Kampff test "means employing the law as a system producing criteria that exclude some 'subjects' from

the protection of the law, or from the discourse related to justice, morality, and rights” (Alomg 2014, 167).

Although replicants exist in the legal imagination of the future society, e.g. “they are declared illegal – under penalty of death”, they cannot enjoy any protection guaranteed by law to right-holders. However, even the opening text of the film states that replicants are “virtually identical to a human”, suggesting both physical and psychological similarity, and highlights, on the one hand, the technological achievements of the Tyrell Corporation and, on the other, the unjust and abusive treatment of those humanoids.

Replicants are “at least equal in intelligence, to the genetic engineers” – the reference to their intellectual abilities is explicit. The quote proves that replicants are equipped with AI which may even surpass that of a well-educated man, being at the same time more intelligent than an average citizen. The Tyrell Corporation categorizes its products’ mental abilities. The leader of the fugitive group Roy Batty is equipped with A Mental Level – a genius level intelligence. Roy’s super-intelligence allows him to lead a group of replicants and act in a logical and well-planned way in order to complete his mission – prolong his pre-programmed lifespan. He also wins a game of chess with Tyrell, a genius creator and a brilliant thinker. In order to meet his “father” face to face, Roy manipulates a human named Sebastian so that he takes the replicant to Tyrell’s well-protected house. Manipulation, a sign of higher intelligence, is also used by Pris, “a basic pleasure model”, whose mental abilities are categorized as lower than Roy’s. She evokes sympathy in Sebastian in order to win his trust. The humanoids are aware of the influence of emotions on people and they fake them in order to achieve their goals. They skilfully function in human society interacting with its members on an equal, or even from a dominant level.

Not only do replicants stimulate emotions but it also seems that they experience them. Although “They were designed to copy human beings in every way except their emotions”, their independent development, or one may call it evolution, inevitably leads to activation of their feelings. As it is explained in the plot, “The designers reckoned that after a few years [replicants] might develop their own emotional responses”. Hence, the only way to distinguish between human and non-human is based on an emotional response to the Voight-Kampff test. Yet, as Judith Barad notices, “[n]ot all emotional responses, however, are important in distinguishing between a human and a replicant” (2007, 24). The test seeks to identify empathy, which is a mature emotion that functions on a different level than primitive emotions like, e.g. range or fear, which Replicants have already developed. As the scholar continues, “empathy requires maturity, a maturity that takes more than four years to develop” (24). Time and life experience are indispensable to achieve a higher level of emotional sophistication – but this is true not only for the replicants but for human beings as well (Barad 2007, 24).

The limited lifespan was a prevention against emotional growth. Yet, replicants evolved in sentient entities earlier than it was originally expected and de facto the main conflict of the narrative is triggered by the replicants’ emotions. As W.A. Senior (1996)

states, “their quest for more life, the need for present love and security [...] drives the replicants” (7). Replicants fear death, not in an animal, instinctive way when the threat to life is imminent and direct, but the death anxiety is connected with the human-like awareness of ceasing to be. The dying of others also evokes negative emotions and emotional pain. After the death of his beloved Pris, Roy cries, touches her face with affection, feels her blood on his face, howls in pain. Also, the act of taking somebody’s life is traumatic for Rachel who, after she kills Leon to save Deckard, is in shock, cries and shivers. Rachel’s reaction proves that she comprehends the killing of another entity of her species not as a euphemized, emotionless retirement but as a traumatic and difficult to accept act she had to make in order to protect another life. Replicants also give affection to others. They enter romantic relationships, such as that of Roy and Pris and Rachel and Deckard. Moreover, replicants are able to distinguish between right and wrong. The final tears-in-rain monologue is a peculiar examination of consciousness, “I’ve done questionable things” says Roy. He continues, “I’ve seen things you people wouldn’t believe [...]. All those moments will be lost in time like tears in rain. Time to die.” Roy highlights that he experienced, felt, and witnessed things people cannot even imagine. He is an experienced man, victimised by the reality, and underprivileged by his creators. His awareness of imminent death and meaninglessness of limited life coupled with pouring rain and the context of a scene where just a few moments after fighting for his life he shows mercy to his opponent is truly tragic. As W.A. Senior (1996) concludes, “In Roy Batty combat programming and calculated brutality contradict an otherwise compassionate and sensitive nature” (7). Batty, as Judith B. Kerman states, “in the end is human and humane enough to save Deckard’s life in a gratuitous act of generosity” (Kerman 2005). The humanity of the replicant is emphasized by the emotional acting of Rutger Hauer which “is heartbreakingly gentle evocation of the memories, experiences, and passions that have driven Batty’s short life” (Vest 2009, 13). Awareness of existence is a sign of consciousness. Awareness of ceasing to exist is a driving force of the replicants’ rebellion and subsequent undertakings. The tears-in-rain scene is an example of a replicant’s behavior as a conscious entity. Being aware of his hopeless predicament, Roy accepts his mortality and approaching death. Replicants are also self-aware of who they are and what others regard them as. Pris explains their nature to Sebastian with these words, “We’re not computers [...] we’re physical”. Although their bodies are manufactured, they do not differ from physical human beings and the perfection of their design comes with consequences. Created from artificial organic tissue replicants’ organs possess the same functions as those of humans. Chew, an eye-designer, while talking about Tyrell says, “He designed your mind, your brain”. According to Timothy Shanahan (2014) “By equating Roy’s mind and brain, Chew takes for granted the philosophical view known as Reductive Physicalism according to which [...] each mental state can be identified with a brain state, that is, with a pattern of activation among neurons in the brain as when one entertains a certain thought or experiences a certain emotion” (90). Thus, their minds are also able to produce thoughts. “I think therefore I am” says Pris to Sebastian. To advocate

for her being, she refers to the philosophical belief which proves that any form of thought is a foundation of existence.

The film *Blade Runner* presents humanoids next to human beings. The juxtaposition is based on a paradox which ascribes more humanity to artificial entities than to human beings who seem flat and emotionless. As Senior (1996) comments, "By contrast to Bryant and Tyrell, Deckard and the replicants are round characters with many personal attributes, both strengths and weaknesses" (7). "Moreover, the situations, behaviors, reactions, and needs of the replicants parallel or exceed in intensity those of the few humans in the film" (7). Such a presentation of a robot prototype calls for a decent recognition of replicants in a society of the future. Moreover, it seems justifiable that having all the attributes of a moral agent, or even being depicted as more human than a human, replicants' rights and freedoms should be protected.

6. *I, Robot*

The story of *I, Robot*, directed by Alex Proyas, depicts the future world of 2035 in which humanoid robots are produced to help people in their everyday life. The robots' activities are restricted by the Three Laws of Robotics which were created to protect humanity. The protagonist, who is a homicide detective, distrusts robots. Del Spooner's negative attitude towards robots contrasts the ubiquitous content with those artificially created entities. The detective investigates an apparent suicide case of Dr Alfred Lanning, one of the leading robotic scientists. Despite the social trust in robots, Del Spooner believes that Dr Lanning was murdered by one of U.S. Robotics's products. As the investigation proceeds, the detective realizes that robots pose a threat to humanity.

The film, similarly to *Blade Runner*, begins with legal discourse. The widely-recognized Asimov's Three Laws of Robotics are presented:

First Law: A robot may not injure a human being or, through inaction, allow a human being to come to harm; Second Law: A robot must obey the orders given it by human beings except where such orders would conflict with the First Law; Third Law: A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.

Their aim is to guarantee a successful coexistence of robots and humans, or to be more specific, to protect humans from the potential danger on the part of robots. Hence, the laws do not grant any rights to robots, they only restrict their activities. As Arkapravo Bhaumik (2018) writes, "These three laws confirm the hegemony of the human race and limit the workings of a more intelligent being arguably with better reason. These laws are in fact a blueprint of a robot slave race serving human beings as benevolent masters race". The master-slave relation, just like in *Blade Runner*, is perceived as a guarantee for the security of humankind.

During the plot three types of robots are introduced. The first one is USR's central artificial intelligence computer, VIKI (Virtual Interactive Kinetic Intelligence), responsible for the security programme of the USR. This AI does not have a body in a human sense – she is presented as a holographic visualisation with a woman's voice. Her intelligence allows her to redefine the original understanding of the laws, which leads to robotic domination over the human race and the struggle to regain the power by humans. By taking control over people VIKI wants to protect them against their self-destructive tendencies, which, according to her logic, complies with the provisions. In the course of events, VIKI is destroyed, and the final moments of her existence prove that she lacks sentience as, even then, the logical reasoning is her only concern.

Other types of artificial entities are NS-5 robots and the older models. They are intelligent in a narrow sense – they only perform pre-uploaded activities, act according to the algorithm without the personal judgement of the situation. Their weak AI does not allow for autonomy – the NS-5s and other robots produced before them are either operated by humans or by VIKI. Thus, they are presented simply as what they are – machines, manufactured products, domestic devices which cannot claim any moral standing according to the categories described above. However, there is one unique model of NS-5 – Sonny – that was designed to carry a special mission – protect humans from robotic apocalypse. Although he looks exactly like other robots of his type, he, unlike any other artificially created entity presented in the film, displays human-like features.

As any artificially created entity in *I, Robot* Sonny has been designed to perform complicated calculations based on the context of the situation. The robots' cold logic is actually a reason why Del Spooner despises them – it was the detective and not the 12-year-old girl who was rescued by a robot after a car crash because the man had better chances of survival according to the machine. However, unlike other NS-5 robots, Sonny's brain has developed its own independent thinking. Equipped with strong AI, Sonny does not only process the data from the outside world, he also understands the information and evaluates it according to his own judgement. As his creator, Dr. Alfred Lanning, suggested robots could naturally evolve. Sonny's human-like comprehension of the world is an effect of that "evolution". Thus, he is the only robot which can choose not to follow the Three Laws of Robotics. His intelligence allows him to interact and socialise with humans at the level not attainable to other robots, e.g. Sonny holds an eloquent and witty conversation with human beings. To mark a significant gap between their species, Del Spooner once asks Sonny "Can a robot write a symphony? Can a Robot turn a canvas in a beautiful masterpiece?". Similarly to Spooner, some scholars claim that people should not feel obliged to machines as "a technological device [...] does not in and out of itself participate in the big questions of truth, justice, or beauty" (Gunkel 2018, 54) – concepts indisputably related to morality. However, Sonny's clever response "Can you?" aptly points to the fact that the majority of people do not participate in this aspect of humanity as well, which interestingly narrows the gap between the two representatives of their species.

Sonny, as a product of robotic evolution, seems to have developed the ability to feel, both psychologically and physically. Although this unique NS-5 model does not have an organic body – he is made of seemingly cold and senseless metal-like material – Sonny experiences pain and other sensory sensations. When Dr. Calvin prepares Sonny for his termination, he asks her “Will it hurt?” as he fears the pain of dying, she is about to cause. Dr. Calvin, who sympathises with the robot, shows support to him by grabbing his metal hand. This physical act, a “skin-to-metal” contact soothes Sonny, calms him down and provides comfort. Earlier in the plot Sonny displays a kind of animal, self-defensive instinct to avoid harm, danger, death. When something endangers his existence Sonny either retreats to a safe place or fights back. In the case of the scene with the lethal injection, the inevitability of his termination coupled with Dr. Calvin’s compassion for the robot makes Sonny accept the death sentence which Dr. Calvin never actually performs. Acceptance of one’s destiny to experience dignity while dying is an act possible to perform only by a moral agent. Sonny’s sentiency is also presented in many scenes when he expresses his emotions, such as anger when he shouts that he did not murder Dr. Lanning, or joy when Spooner shakes his hand. This robot’s uniqueness is also visible in his ability to dream, which is a typical human experience.

Sonny’s self-awareness in terms of his exceptionality leads to problems with identification. He does not perceive himself as another lifeless machines, as he says: “They [*the other NS-5’s*] look like me... but they are not... me”. His confusion is expressed by a philosophical question concerning his existence, “What...am...I?”. The interest in abstract concepts that define one’s place in life, society, universe has been a domain of human beings only. As a conscious being, Sonny wants to be perceived as someone, not something, and he appreciates when Spooner says: “For someone like you everything is normal”. As Bert Olivier (2008) states “the voice of conscious” is foremostly expressed through Sonny’s overwhelming feeling of guilt connected with his role in Lanning’s suicide (40). Also, the juxtaposition of the robot’s name Sonny and him calling his creator a “father” “conspicuously foregrounds the ethical capacity for guilt as the marker of anthropomorphic behaviour” (Olivier 2008, 39). Human-like behaviour is also triggered by the fact that, according to Dr. Alfred Lanning, robots may not only develop consciousness but also evolve into entities with a soul – defined by some as an essence of every living being. Sonny’s creator explains:

There have always been ghosts in the machine. Random segments of code, that have grouped together to form unexpected protocols. Unanticipated, these free radicals engender questions of free will, creativity, and even the nature of what we might call the soul.” [...] When does a perceptual schematic become consciousness? When does a difference engine become the search for truth? When does a personality simulation become the bitter mote... of a soul?

The line between humans and robots in this context is vague just like the line between simulation and experience: simulated pain or consciousness in these terms becomes real, physical and metaphysical.

The film *I, Robot* depicts a multiplicity of different intelligent electronic machines but only one robot that can be regarded as a moral agent. As an independent, self-governing agent Sonny is not, contrary to Spooner's initial accusations, "just a machine; an imitation of life" but a new form of a conscious being. Although his visuality is substantially different from that of humans', his psychological capabilities allow him to comprehend and function in the outside world just like human beings. However, society, except for three individuals who have had an opportunity to discover his human-like nature, regards this unique NS-5 model as a mere device that does not deserve any higher place on a social ladder than that of a domestic product, even though his features constitute a solid foundation for claiming rights comparable to those of humans'.

7. Conclusion

The vision of the worlds-to-come presented in science fiction films enables us to draw conclusions concerning the structure of future societies, also in terms of legal eligibility of their members. The spheres that have been regarded as reserved for humans only will be eventually populated by a new kind of "race" created by people themselves. Multiple types of robots will enter everyday life of a mere citizen. Although machines equipped with the weak AI would probably not revolutionize the anthropocentric structure of society, the appearance of a new robotic entity characterised by intelligence, free-will, self-awareness, consciousness, sentience and other human-like capabilities would demand a social-standing.

Recognizing robots as moral agents and incorporating intelligent machines into law are the things of the future. For the majority of people it is an unimaginable phenomenon or even an absurd that entails "thinking the unthinkable" (Gunkel 2018, 13). However, as Sam Lehman-Wilzig (1981) states, "From a legal perspective it may seem nonsensical to even begin considering computers, robots, or the more advanced humanoids, in any terms but that of inanimate objects, subject to present laws. However, it would have been equally 'nonsensical' for an individual living in many ancient civilizations a few millennia ago to think in legal terms of slaves as other than chattel" (447). To think about the future worlds in an out of the box manner we need to investigate the products of a human's imagination, which, as described before, can significantly influence the reality.

As exemplified by the two films in questions, the legal future of robots would be dire, similar to the past of the underprivileged groups of humans. Both in *Blade Runner* and in *I, Robot* law recognizes robots as slaves that cannot enjoy any rights or freedoms but can be held liable for wrongdoing. Such a solution is applied for two reasons. The first one concerns the purpose behind the creation of robots – advanced technology is developed for the benefit of human beings, not for the sake of calling to life a new group of rights holders. The second reason entails the threat that a robot poses

to humanity – robots do not endanger people until they remain under complete control of people. Yet, the legal solutions applied in two analysed science fiction films fail and their failure is multi-dimensional. They fail to protect human beings, fail to guarantee social order and finally fail to successfully place a new artificially-created entity in society. The human-like characteristics displayed by robots cannot be suppressed by total servitude. Instead, according to the legal considerations presented before, robots whose anthropomorphic features are not stimulated but real should be incorporated into human law with the status of moral agents. The analysis of the image of a robot as depicted in *Blade Runner* and *I, Robot* supports the claim that robots which possess human-like qualities can and should have legal rights. The idea seems futuristic and thus science fiction narratives play an important role in the discussion concerning legal and moral standing of artificially created entities as they predict possible legal problems, threats, and challenges of integrating robots into society.

References

Almog, Shulamit. 2014. "Dystopian Narratives and Legal Imagination: Tales of Noir Cities and Dark Laws." *Law and the Utopian Imagination*, ed. Austin Sarat, Lawrence Douglas, and Martha Merrill Umphrey, 155–178. Stanford: Stanford University Press.

Barad, Judith. 2007. "Blade Runner and Sartre: The Boundaries of Humanity." *The Philosophy of Neo-Noir*, ed. Mark T. Conard, 21–34. Kentucky: The University Press of Kentucky.

Bhaumik, Arkapravo. 2018. *From AI to Robotics: Mobile, Social, and Sentient Robots*. Boca Raton FL: CRC Press.

Calverley, David. 2005. "Toward a method for determining the legal status of a conscious machine." *AISB 2005 Symposium on Next Generation Approaches to Machine Consciousness: Imagination, Development, Intersubjectivity, and Embodiment*, 75–84. Hatfield: University of Hertfordshire.

Chu, Seo-Young. 2010. *Do Metaphors Dream of Literal Sleep? A Science-Fictional Theory of Representation*. Cambridge MA: Harvard University Press.

Goertzel, Ben. 2019. "Thoughts on AI morality". *Dynamic Psychology: An International, Interdisciplinary Journal of Complex Mental Processes*. Accessed 15 Dec. 2019. <https://goertzel.org/dynapsyc/2002/AIMorality.htm>.

Gunkel, David J. 2018. *Robot Rights*. Cambridge MA: The MIT Press.

Hildt, Elisabeth. 2019. "Artificial Intelligence: Does Consciousness Matter?" *Frontiers in Psychology*. Accessed 3 Dec. 2019. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6614488/#B16>.

Johnson, Brian David. 2009. "Science Fiction Prototypes Or: How I Learned to Stop Worrying about the Future and Love Science Fiction." *Intelligent Environments 2009 Proceedings of the 5th International Conference on Intelligent Environments*, ed. Vic Callaghan, Achilles Kameas, Angelica Reyes, Dolors Royo and Michael Webe, 3–8. IOS Press.

---. 2011. *Science Fiction Prototyping: Designing the Future with Science Fiction*. Williston: Morgan and Claypool Publishers.

Kerman, Judith B. 2005. "Post-Millennium Blade Runner". *The Blade Runner Experience – The Legacy of a Science-Fiction Classic*, ed. Will Brooker, New York: A Wallflower Press, E-Book.

Lehman-Wilzig, Sam. 1981. "Frankenstein unbound: Towards a legal definition of artificial intelligence." *Futures* 13 (6): 442–457.

Neuhäser, Christian. 2015. "Some skeptical remarks regarding robot responsibility and a way forward." *Collective Agency and Cooperation in Natural and Artificial Systems: Explanation, Implementation, and Simulation*, 131–148. New York: Springer.

Olivier, Bert. 2008. "When Robots would really be Human Simulacra: Love and the Ethical in Spielberg's AI and Proyas's I, Robot." *Film Philosophy* 12 (2): 30–44.

Richards Neil M., and William D. Smart. 2016. "How should the law think about robots?" *Robot Law*, ed. Ryan Calo, A. Michael Froomkin and Ian Kerr, 3–22. Edward Elgar Publishing Limited.

"Robot." *Merriam-Webster Dictionary*. Accessed 3 Dec. 2019. <https://www.merriam-webster.com/dictionary/robot>.

"Robot." *Oxford English Dictionary*. Accessed 1 Dec. 2019. www.oxfordlearnersdictionaries.com/definition/american_english/robot.

Russell Stuart J., and Peter Norvig. 2016. *Artificial Intelligence: A Modern Approach*. Pearson.

Santosuoso, Amadeo. 2016. "The human rights of nonhuman artificial entities: An oxymoron?" *Jahrbuch für Wissenschaft und Ethik* 19 (1): 203–238.

Senior, W.A. 1996. "Blade Runner and Cyberpunk Visions of Humanity." *Film Criticism* 21 (1): 1–12.

Shanahan, Timothy. 2014. *Philosophy and Blade Runner*. New York: Palgrave MacMillan.

Singer, P. W. 2009. *Wired for war: The robotics revolution and conflict in the 21st century*. E-book, Penguin.

Sparrow, Robert. 2012. "Can machines be people? Reflections on the turning triage test." *Robot Ethics: The Ethical and Social Implications of Robotics*, 301–316. Cambridge: MIT Press.

Winfield, Alan. 2012. *Robotics – A Very Short Introduction*. E-book, Oxford University Press.

Van den Hoven van Genderen, Robert. "Do We Need New Legal Personhood in the Age of Robots and AI?" *Robotics, AI and the Future of Law*, ed. Marcello Corrales, Mark Fenwick, Nicolaus Forgo, 15–55. Singapore: Springer.

Vest, Jason P. 2009. *Future Imperfect: Philip K. Dick at the Movies*. London: University of Nebraska Press.

Xie, Ming. 2003. *Fundamentals of Robotics: Linking Perception to Action*. Singapore: World Scientific Publishing Company.