The Construction of Body and Consciousness in Do Androids Dream of Electric Sheep?

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Abstract: "Do Androids Dream of Electric Sheep?" is a significant work of science fiction that explores the concept of the post-human condition. In his literary works, Philip K. Dick undertook the task of reconfiguring the physical and cognitive aspects of both human beings and replicants. One perspective suggests that there is a growing trend towards cybernetization in the human body, while another perspective argues that the physical composition of replicants is progressively resembling that of human beings. In contrast, there is a growing interconnection between human beings and replicants within the realm of mind and emotion. This research aims to examine the correlation between the physical, technical, cognitive, and subjective aspects of human and replicant bodies, thereby offering an interpretation of this novel concept via the lens of post-humanism. The act of constructing blurs the distinction between humans and androids, hence giving rise to an ethical dilemma wherein both humans and androids vie for subjective experiences. The establishment of a novel topic incorporating both human and non-human entities, with the aim of critically examining anthropocentrism, can be seen as a potential solution to address this issue.

Keywords: Do Androids Dream of Electronic Sheep?, post-humanism, body, consciousness

1. Introduction

"Do Androids Dream of Electric Sheep?" is a work of science fiction authored by Philip K. Dick, an American writer. The narrative chronicles the odyssey of Rick, a professional pursuer of bounties, as he undergoes a gradual process of emotional attachment to androids while apprehending them. The author establishes a construct of artificial intelligence referred to as "androids," which have a physical resemblance to humans while surpassing ordinary human intelligence. This phenomenon compels us to reassess the delineations between humans and robots, as well as the parameters that define humanity. In the era after the post-human condition, the conceptualization of "body" and "consciousness" is undergoing a reevaluation, hence reshaping fundamental aspects pertaining to human existence.

There is a limited body of literature within the field of post-humanism that examines this particular subject, with a predominant emphasis on the ethical quandaries surrounding androids, the emotional challenges faced by post-human entities, and the issue of technological dominance. Consequently, there is a significant gap in research that remains unexplored. This paper aims to examine the correlation between the physical bodies and consciousness of humans and androids within the framework of post-human construction. It highlights the erasure of boundaries between

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humans and machines and endeavors to propose a novel subject that encompasses both human and non-human elements as a means to address the ethical quandary surrounding human-machine subjectivity.

2. Body and Technology: The Blurring of Human-Machine Boundaries

In the novel, technology transforms human and android bodies. In terms of the human body, human-machine splicing and emotion regulation technologies have led to the cyborgisation of the human body. "Cyborg is etymologically a combination of the first three letters of cybernetic and organism. In The Cyber Manifesto, Haraway argues that it is a cybernetic organism that is a mixture of organism and cybernetic machine, and is both a creature of social reality and a character of science fiction [1]. This hybrid human-machine body is embodied in several of the novel's most representative settings, namely the plastic spine, the emotion regulator and the resonance box.

The story commences with the protagonist, Dave Holden, a seasoned bounty hunter of advanced age, experiencing a penetrating injury to his spinal column caused by a laser emitted by the androids. Consequently, he is compelled to undergo an extended hospitalization period of no less than one month, during which a state-of-the-art organic plastic spine is surgically implanted to replace the damaged one [2]. Holden's body is equipped with a plastic spine, thereby transforming him into a cyborg. This merging of human and artificial components plays a crucial role in facilitating his recovery and restoration of his life. Dick's exploration of medical technology prompts an inquiry into the potential erosion of distinctions between the human body and its artificial counterpart.

Cybernetic technology possesses the capacity to not only address physical injuries but also supplant the emotional faculties of the human body. The post-war survivors in Dick's work have shared emotional inadequacies, which can be attributed to a multitude of intricate factors. Individuals has limited capacity to fully experience and comprehend emotions, including love, wrath, happiness, as well as more complex emotional states like as emptiness, despair, and depression. To facilitate the understanding and manifestation of these emotions, a technological apparatus referred to as the "Penfield Mood Organ" is employed. Within the context of the story, it is evident that lran exhibits a reluctance to engage in intimate encounters with Rick. Furthermore, their expressions of fury during fights are solely discernible through the utilization of thalamic stimulants generated by the aforementioned gadget. The word "organ" used by Dick suggests his perception of it as a human organ, as the gadget assumes specific bodily functions and integrates with the human body.

In addition to the "Emotion Regulator", Dick also introduced the "Resonance Box" setting in the novel. The Resonance Box is an intervention apparatus that employs virtual reality technology to establish a connection between humans and machines. The act of grasping the handle of the resonance box allows individuals to immerse themselves in the virtual environment depicting the journey of "old man" Mercer as he ascends and descends the mountain. This immersive experience aims to evoke a religious-like sensation akin to "empathy". Currently, the human emotional experience is augmented by the virtual identity within the empathy box. According to Katherine Heller, the physical representation of the body is generated inside a digital setting by means of linguistic and semiotic indicators. These two aspects are closely interconnected through the utilization of technology [3]. In this way we can think of the body using the resonance box as the 'manifested body' and the Mercer in the virtual electronic scene as the 'reproduced body'. It is through the technology of the resonance box that the human and the Mercer merge and the overlapping of the two bodies is realised. At this moment, "the technology has intervened and is so intertwined and interwoven with the identity of the product that it is no longer possible to separate it

from the human subject in the full sense of the word" [3]. The new conception of the body is analogous to a cybernetic circuit, and when the body is connected to the cybernetic line, the transformation of the line inevitably transforms consciousness.

The physicality of androids' bodies manifests in a corporeal manner. The term "androids" is employed by Dick to designate humanoid robots. In the novel, the term "androids" pertains to "bionics" that are produced by the utilization of artificial gene combination technology. This terminology implies that these entities possess an outward look and physical structure that closely resemble that of human people. Contrary to popular misconceptions, these entities do neither resemble automatons with concealed wiring and gears beneath their dermis, nor do they possess the repulsive and monstrous appearance depicted in Mary Shelley's novel, Frankenstein. The resemblance between androids and humans poses a significant threat to human self-awareness, hence necessitating a pressing need for humans to establish clear delineations between themselves and androids. Within the context of the story, the concept of "empathy" assumes a significant role in discerning androids from humans. Henceforth, the subsequent part will commence by employing empathy as a foundational concept to investigate the impact of bodily experiences on the cognitive and affective states of both humans and androids.

3. Body and Consciousness: Rick's Two Empathies

American neuroscientist Antonio Damasio argues in "When the Self Comes Knocking - Building the Conscious Brain" that "consciousness is a state of mind in which one is aware of one's own existence and that of one's surroundings" [4], and that emotions and feelings are an important part of consciousness. From a neuroscientific standpoint, human consciousness is predicated upon a complex network of numerous neurons within the brain. The construction of consciousness in the story is similar for both humans and androids, with the exception that the androids possess Nexus-6 brain units. In contrast to humans, androids lack a distinct cognitive capacity known as empathy, which encompasses the ability to experience and understand the emotions and feelings of others. Empathy refers to the cognitive and affective capacity to comprehend and vicariously encounter external phenomena and emotions that lie beyond one's own subjective experience. Within the context of the story, Rick experiences two instances of empathetic response towards androids. The initial occurrence involves a sense of pity towards the android character named Luba, while the subsequent instance entails a feeling of affection towards the android named Rachael.

According to Husserl in "The Phenomenology of the Interacting Subject", empathy is primarily based on the perception of the other's body, the body which in this case is a complex of "mind-objects", "a body with an individual life of the mind", "We give to another body together perception, freedom of movement, the different orientations of things, and so on" [5]. Recall Rick's rhetorical references to Ruba's body: her mood is "lively and splendid"; her voice is "most beautiful"; and her dress is "shiny and golden". The rhetoric is positive and appreciative. Rick says: "Most of the androids I've known have been more alive and wanted to live than my wife" [2], "Androids are so vibrant and alive, they don't seem like an analogue at all" [2]. It can be seen that Rick puts his perception of beautiful things and his desire for vibrant life into Luba's body, and he feels empathy for Luba, not only for her beautiful appearance, but also for her vibrant 'soul', the 'individual spiritual life' of her body.

In Rick's second empathy with the androids, the physical experience of sex breaks the last line of the humans and androids. In the novel, the android Rachael has a paradoxical but seductive physical body, with long black hair and a thin frame. "Her thick black hair framed her large face, and her small breasts made her body look as thin as a child's. But her large eyes and long eyelashes could only belong to a mature woman, not an adolescent girl" [2]. The literary work extensively portrays Rachel's physical attributes, employing a narrative that emphasizes her "feminine" physique.

Through this portrayal, the author subtly alludes to Rick's internal exploration of his own sexuality. Despite the government's stringent prohibition on human-android partnerships, Rachel's android identity progressively diminishes in Rick's perception. Merleau-Ponty posits that there exists an inherent connection between sexuality and individuals possessing cognitive and volitional capacities, wherein a reciprocal representation is established. This notion is exemplified in the case of Rick and Rachel, whose sexuality serves as a manifestation of this interplay, as they unconsciously translate their respective physical encounters into the realm of conscious emotions.

Rachael had told Rick, "Don't think about it, just do it" [2]. Instead of directly persuading Rick not to go after the androids, she chose to engage him in the most direct physical contact. When the brain cannot explain something purely through analysis, concrete and tangible physical experience becomes a proven means instead. "You will never be able to hunt androids again, no bounty hunter will be able to continue his work after sleeping with me" [2], "sleeping with" is an act of experience that occurs through the body, and Rachael as the subject achieves self-knowledge in the concrete experience [6].

However, the alteration resulting from the physical encounter has a reciprocal effect. It not only engenders affection inside Rick for Rachel, but also elicits a corresponding sentiment within Rachel. The individual perceives that Rick's affection towards his pet goat surpasses his affection towards his wife. Subsequently, following Rick's termination of her android buddy, she proceeds to ascend into Rick's rooftop garden and intentionally releases Rick's cherished goat, exhibiting a conspicuous act that suggests a deliberate desire to make him aware of her actions. The shown behavior, whether stemming from envy towards Rick's favored goat or a desire for retribution due to Rick's actions towards his associate, demonstrates the capacity of androids to experience empathy. This occurrence signifies a growing connection between humans and androids in terms of awareness and emotional understanding.

4. The Body and the Subject: Constructing a New Subject

According to Frederic Jameson, a prominent American literary critic of the time, the novels of Philip K. Dick can be regarded as works of literature that explore the concept of the "death of the subject." In doing so, these novels challenge the notion of individualism by critically examining the remaining fragments of the self [7]. The concept of "subjectivity" is intricately linked to the epistemological and cosmological aspects of Western philosophy. The examination of "subjectivity" revolves around the interpretation of the human body and mind, as well as the establishment of the connection between the two. This exploration is supported by the inquiry and delineation of the characteristics that define human beings.

Within the novel, the author upholds the longstanding tradition of employing a dualistic framework, as initially developed by Descartes, to explore the duality between the mind and body. This framework positions the conscious mind as the focal point of human subjectivity. Simultaneously, the author used the "reason-sense" framework to ascribe human nature to emotions. The assertion made by the human government posits that androids lack the capacity for empathy, hence rendering empathy as a characteristic exclusive to human subjectivity. Nevertheless, as androids progress in their cognitive abilities, they assert their own existence, acknowledge their subjugated position within socio-ethical frameworks, and strive for an identity and entitlements on par with those granted to human individuals.

If humans construct subjectivity through the conscious mind, the androids construct their own subjectivity through the body in reverse. In the novel, the author allows the android Rachael to break through the last boundary of human-machine through physical experience, suggesting a possibility for the androids to construct subjectivity through the body, and Merleau-Ponty's phenomenology of perception provides a theoretical basis for the construction of the androids'

subjectivity. Firstly, Merleau-Ponty uses the phenomenological body to abolish the dichotomy between body and consciousness, arguing that "the union of soul and body is realised every moment in the movement of being" [8], thus seeing the body as the root of human perception and understanding of the world. Secondly, Merleau-Ponty criticises the a priori idealism established from Descartes to Kant. While a priori idealism sees the world as a construct of man's inner consciousness, Merleau-Ponty argues that "the world is not what I think, but what I experience" and that we perceive the world through bodies and exist in the world through bodies [9]. In this way, Merleau-Ponty replaces the "consciousness-subject" with the "body-subject", and androids acquire subjectivity through the notion of the "body-subject".

The acquisition of subjectivity by androids presents a disconcerting phenomenon that poses a potential threat to human subjectivity. This development raises an ethical concern over the emergence of a competition between humans and machines for the preservation of subjectivity. Within the context of the novel, the governing body of the human society strategically establishes a predetermined lifespan of four years for androids, designating them as mere instruments intended solely for human service. This deliberate measure is implemented with the aim of safeguarding the subjective dominance of humans, thereby preventing androids from developing into a sustainable and formidable collective capable of mounting a rebellion against their human counterparts. Wang Feng unpacks this enslaved existence of androids and raises the question of the displacement of ethical perspectives. He argues that "androids deprived of their identity as real people are equivalent to the Jews in the Nazi concentration camps, their dignity and rights have been completely taken away, they are just a living property, a naked life with only a physical body" [10]. That is, if people talk about their living conditions from the ethical perspective of bionic humans, it will inevitably find the cruelty and limitations of the ethical perspective of "anthropocentrism".

An anthropocentric ethical framework prioritizes human interests as the ultimate objective, emphasizing that only human beings are deserving of consideration, whereas other beings possess solely instrumental worth. The significance of this is underscored by several dualistic frameworks that rely on the criterion of 'subject/object'. This theoretical framework posits that the first entity is ontologically superior, typically considered primary, and has a center position, while the second entity is typically secondary and derived from the first. Within this conceptual framework, human beings assume the role of subjects, exerting mastery and asserting dominance, while androids are relegated to the position of objects, serving as tools and being subjected to enslavement.

The ethical heritage of anthropocentrism has been shown to exhibit an indifference towards the moral considerations and rights pertaining to androids. Hence, to address the ethical quandary arising from the competition between humans and androids regarding subjectivity, there is an imperative need to develop a novel ethical framework. This framework must surpass the constraints of an anthropocentric viewpoint and encompass the participation of both humans and androids in the formation of the concept of "subject." This implies that individuals are no longer required to build delineations, but rather to liberate themselves from the limitations imposed by the binary structure of "subject/object" and to reconsider the conceptualization of "life".

The French philosopher Foucault wrote in Words and Objects that "man will be erased like a face in the sand by the sea" [11]. The concept of the "death of man" was initially introduced by Foucault, wherein the authority of human subjectivity was undermined through the critical examination of "anthropocentrism". Foucault's assertion provides a perspective that challenges the centrality of defining "life". Rossi Braidotti emphasizes the significance of "non-human vitality" in the context under consideration and puts forth the notion of a "concept of universal vitality". According to her perspective, the concept of "life" is not regarded as a revered and inherent entitlement, nor is it considered an exclusive characteristic of human beings in comparison to other species. Instead, it is perceived as an ongoing and dynamic phenomenon characterized by many

forms of interaction. The concept of "universal vitality" can be understood as a dynamic and self-organizing structure inherent in living organisms. This structure, exemplified by reproductive vitality, serves to reunite species, domains, and categories that were previously isolated from each other [12]. The author argues that the notion of universal vitality may be key to the construction of a shared subjectivity between humans and androids, akin to a bridge that connects humans and non-humans as equals in a new subject.

At the end of the novel, a live toad saves Rick from a nervous breakdown and restores his faith in life. Interestingly, the toad also turns out to be an electronic animal. At the end of the story, Rick's wife buys electronic flies to feed the toad, and the couple accept this fact and decide to take good care of it. This ending seems to suggest a possibility for man and machine to construct a common "subjectivity". Although the electronic toad is not a real carbon-based life form, the "non-human strength" it displays infects Rick. In essence, Rick renounces anthropocentrism and attains an understanding of the symbiotic relationship between oneself and others through a posthuman ethical framework that surpasses the notion of the individual [13]. In this hypothetical situation, both carbon-based and silicon-based entities transition into a novel state of consciousness, wherein subjectivity ceases to be exclusive to human beings and instead becomes a form of egalitarianism characterized by a "universal vitality." This state of affairs fosters a harmonious coexistence between humans and machines, giving rise to a new system in which all living and non-living entities mutually share and attain their optimal conditions.

5. Conclusion

Ultimately, while the aforementioned conceptualization of subjectivity offers a resolution to the ethical quandaries surrounding human-computer interactions, it is important to acknowledge that this proposed solution remains grounded in idealistic notions. The practice of anthropocentrism has resulted in numerous adverse outcomes. Nevertheless, the utilization of technology has undeniably safeguarded the existence and well-being of the human species, rendering it arduous to surpass its fundamental origins. To a certain degree, the concept of the "new subject" may also serve as a veiled concession made by individuals as a means of self-preservation. Simultaneously, despite the program's aim to eliminate the limitations imposed by the dualistic framework, which relies on the "subject/object" criterion, the notion of the "new subject" continues to employ the traditional theoretical framework for nomenclature. The potential inclusion of more entities inside the "object" category and the potential reestablishment of subject-object dualism in this emerging field is yet to be determined. According to Wittgenstein, the boundaries of the linguistic abilities determine the boundaries of the perception and understanding of the universe. The dynamic and indescribable nature of the future world is a topic of exploration in this study. The proposed solution is an ethical assessment that draws from science fiction literature, which is confined by the current cognitive framework and cultural context, and expressed through a constrained language. Regarding the future, the cognitive and behavioral endeavors are limited to envisioning and pursuing an idealized trajectory, one that entails the establishment of an inclusive and innovative global society.

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