

56. Re-evaluating the agency of non-human subjects in Adrian Tchaikovsky's *Dogs of War*¹

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Abstract

Adrian Tchaikovsky is renowned for exploring animal consciousness and non-human perspectives in his works. His 2017 novel *Dogs of War* exemplifies the dominance of anthropocentrism within the novel's transhumanist context, wherein genetically engineered non-human bioforms are exploited by humans. This study argues the way humans perceive and treat non-human subjects in the novel, which are reduced to "disposable bodies" (Braidotti, 2013, p.15), extends the reach of human-centred ideology into transhumanism. Therefore, the termination of the bioforms once they are deemed obsolete demonstrates a utilitarian view of life within transhumanist thought. Building upon these arguments, this study examines whether genetically engineered non-human entities in the novel are entitled to the same rights as their human creators, who design and command them in the pursuit of technological and military advancements. By extension, this study proposes Tchaikovsky's portrayal of bioform animals resonating with Donna Haraway's concept of the "cyborg," which challenges the traditional concept of humans by attributing agency and sentience to these beings. The study seeks to illuminate the complex interplay between human and non-human agency, thereby questioning the established hierarchy of beings in the context of transhumanist thought.

Keywords: Adrian Tchaikovsky, *Dogs of War*, Transhumanism, Anthropocentrism, Posthumanism.

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Adrian Tchaikovsky'nin *Savaş Köpekleri*'nde insan-dışı öznelerin faillikini yeniden değerlendirilmesi⁴

Öz

Adrian Tchaikovsky, eserlerinde hayvan bilinci ve insan dışı varlıkların bakış açılarını irdelemesiyle tanınıyor. Yazarın 2017 tarihli *Savaş Köpekleri* adlı eseri, genetik olarak tasarlanmış insan-dışı biyoformların insanlar tarafından sömürüldüğü transhümanist bağlamda insanmerkezciliğin hâkimiyetini örnelemektedir. Bu çalışma, eserde "gözden çıkarılabilir bedenlere" (Karakas, 2014, p. 28) indirgenen insan dışı öznelerin insanlar tarafından algılanma ve onlara muamele edilme biçiminin, insan-merkezci ideolojinin transhümanizmde varlığını sürdürdüğünü savunmaktadır. Dolayısıyla, biyoformlarla ilgili işler bittiğinde bir kenara atılmaları ve hatta öldürülmeleri, transhümanist düşünce içinde çıkarıcı bir yaşam görüşünü ortaya koymaktadır. Bu argümanları temel alan bu çalışma, romandaki genetiği değiştirilmiş insan dışı varlıkların, teknolojik ve askeri ilerlemelerin peşinde onları tasarlayan ve yöneten insan yaratıcılarıyla aynı haklara sahip olup olmadığını incelemektedir. Buna ek olarak, bu çalışma Tchaikovsky'nin biyoform hayvan tasvirinin Donna Haraway'in "siborg" kavramıyla örtüştüğünü ve bu varlıklara faillik ve bilinç atfederek geleneksel insan kavramına meydan okuduğunu öne sürmektedir. Çalışma, insan ve insan olmayan failler arasındaki karmaşık etkileşimi aydınlatmayı ve böylece transhümanist düşünce bağlamında varlıkların yerleşik hiyerarşisini sorgulamayı amaçlamaktadır.

Anahtar Kelimeler: Adrian Tchaikovsky, *Savaş Köpekleri*, Transhümanizm, İnsanmerkezcilik, Posthümanizm.

Introduction

Recently, transhumanism and critical posthumanism have gained significant attention as frameworks for exploring complex connections between humans and nonhumans, including animals, plants, synthetic beings, and AI. This interest has led to re-evaluating human identity and their relationship with other entities considering environmental and technological changes. This academic fervour is paralleled in arts and literature, where creators have long examined the diverse portrayals of nonhumans and their intricate interactions with human beings. Science fiction has become an important genre for authors studying the ever-evolving themes of nonhuman or posthuman entities. As an example of such a narrative, Adrian Tchaikovsky's *Dogs of War* reflects the cultural interest in the liminality between human and nonhuman through the story of a dog-human hybrid Rex in a not-so-distant future.

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Transhumanism, which has been a subject of intense scholarly interest since the 1990s, is sometimes referred to as “popular posthumanism” (Islam, 2016, p. 116; Nayar, 2018, p. 14) or the “dark twin” of posthumanism (Ağın, 2020, p.25), indicating its contentious position within the broader intellectual discourse on human evolution and technology. Therefore, transhumanism is portrayed in the novel as a double-edged sword. While transhumanism carries the promise of improving human conditions through biotechnological enhancements, it simultaneously presents profound ethical concerns.

This paper aims to explore the anthropocentric view of transhumanism, which may lead to new risks, perpetuate existing societal divides, and engender new forms of inequality among augmented and non-augmented entities of all classes, races, and genders and between human and nonhuman bioforms in this case. It also examines the shifting boundaries between humans and bioforms in the face of advancing biotechnologies, as portrayed in the novel and suggests a pre-apocalyptic world where biotechnological enhancements elevate animals to, or even beyond, human levels of intelligence, disrupting long-standing barriers and hierarchies.

This paper posits that the persistent denial of animal agency and the entrenched belief in human exceptionalism within Western thought not only fail to contain but may also worsen the emergence of a monstrous animality in a technologically altered transhuman future. Through the lens of the novel's intertwined narratives of characters with both human and nonhuman traits, particularly through the character Rex, the paper proposes a hopeful vision of a future that celebrates the coexistence of diverse beings. By doing so, it aims to encourage empathy for these biotechnologically enhanced entities and prompt readers to reconsider the essence of posthumanist empathy, thereby offering a counter-narrative to human-centric arrogance.

Adrian Tchaikovsky is known for his creative depiction of characters that are either non-human or that combine human and animal traits. In his novel *Dogs of War*, Tchaikovsky introduces readers to a thought-provoking vision of the near future where genetically engineered non-human animals play pivotal roles. The story is mainly told by Rex, the leader of a pack that includes other bio-forms. Their mission, under the command of a human named Murray who works for a private security firm, is to track and neutralise targets identified as threats to corporate interests, ensuring the protection of their assets worldwide.

The book opens with Rex and his multiform assault unit fighting at the forefront of a dirty war in south-eastern Mexico. Initially, Rex, along with other bioforms, did not question the human master Murray's orders, carrying out actions that led to the death of thousands of people simply because they were labelled as "enemies" or not "friends" (Tchaikovsky, 2017, p. 31). Rex could not make independent decisions, challenge established hierarchies, or disconnect the feedback chip implanted within him that commends him with “Good Dog” (Tchaikovsky, 2017, p. 5) each time he follows an order. However, as the narrative progresses, Murray's assistant deactivates Rex's encoded hierarchies implant, and Rex begins to question the ruthless commands given by his mercenary leader Murray. He and his pack leave the base camp, and Rex has to make a few decisions on his own. When the world uncovers the heinous details of the genocide done in Mexico, they hold Rex responsible, and the International Court of Justice has to deal with a profound ethical dilemma: whether Rex as the leader should be viewed as a dangerous weapon warranting decommission or recognised as a sentient being entitled to life and liberty. Ultimately, through the journey of Rex, the novel prompts readers to contemplate a core question in posthumanist discourse: How do we define and differentiate the human and non-human?

What makes Tchaikovsky's *Dogs of War* an example is its narrative journey of Rex who undergoes a profound transformation, evolving from being a mere instrument of warfare to becoming a sentient entity seeking autonomy and ethical recognition. Before engaging in a detailed analysis of the transhumanist technologies and posthuman critique of transhumanism, along with the divergences between these conceptual frameworks, this study first explains transhumanism and critical posthumanism. Then, it focuses on the manifestation of transhumanist ideologies within the sphere of biotechnological innovation, promoted by tech corporations. After that, these advancements are scrutinized for their role in the creation of bioengineered animal soldiers designated for warfare and the enhancement of human life quality.

A General Overview of Transhumanism and Critical Posthumanism

Robert Ranish and Stefan Lorenz Sorgner (2014) define transhumanism as a concept that explores the human condition amid the rise of technoscientific advancements in the modern world. They posit that human nature in its current form is insufficient to keep up with future progress due to physical, emotional, and cognitive limitations (p.20).

Doede posits that transhumanist thinkers argue that despite improving social engineering, humanist reform, moral education, and religious discipline, the human being has failed to evolve into a better and gentler being. On the contrary, wars between nations, tragic murders and crimes, ageing, death, terminal diseases, and severe anxiety in almost every phase of today's world have been drastically increasing. Nature seems to have fallen down on the job of human evolution (p. 40-41).

Nick Bostrom (2005a) argues, "transhumanists view human nature as a work-in-progress, a half-baked beginning that we can learn to remold in desirable ways" (p. 4). The belief is that humanity can achieve an enhanced state by applying existing technologies, like genetic engineering and information technology, along with prospects such as all-encompassing virtual reality, nanotechnology at the molecular scale, and artificial intelligence (p. 3). These advancements may enable humans to evolve into posthumans, characterised by unending health spans, superior intellectual capacities compared to today's humans, and potentially novel senses or ways of experiencing reality, as well as mastery over their emotions (p. 4).

While transhumanism presents an optimistic vision of human evolution, there is a darker, more dystopian aspect to it that cannot be ignored. Critical posthumanism, in particular, serves as a counterpoint by questioning the assumption that the benefits of transhumanist ideology might outweigh the risks. In the critical posthumanist approach, the true potential of technology to enhance human life depends on moral evolution, so the process of human enhancement raises profound ethical considerations. The dialogue between transhumanism and ethical discourse becomes pivotal as it is not only about humans' enhancement but also about the broader implications of such profound transformations on humans and nonhumans.

Critical posthumanism, as Ranish and Sorgner (2014) argue, is similar to transhumanism and also seeks to achieve a posthuman state, but it adopts a more cautious approach, scrutinising the anthropocentric outlook and exploring the effects of technology on our understanding of human identity. It aims to move beyond humanism, as humanism has been identified as the root cause of various forms of discrimination against both certain human and non-human beings, as well as the destruction of nature (p.8).

Rosi Braidotti (2013) examines the concept of "the human" of Humanism, which Bostrom identifies as the foundation of transhumanism (2005b). Braidotti describes "the human" of Humanism, as a "normative convention" (p.26). This convention sets up a systematic standard for identifying similarities, which gives individuals distinct social roles. The process operates by transforming a particular manner of humans into a norm, often leading to exclusion and discrimination. This standard, often white Western male, is seen as distinct from sexualised, racialised, and naturalised others (Braidotti, 2013, p.26), "who are reduced to the less than human status of disposable bodies" (Braidotti, 2013, p.26). Thus, connecting her approach to posthumanism with "postanthropocentrism", Braidotti (2013) approaches postanthropocentrism as positing that life is "far from being codified as the exclusive property or the unalienable right of one species, the human, over all others" (p. 61) and that postanthropocentrism "displaces the notion of species hierarchy and of a single, common standard for 'Man' as the measure of all things" (p.67).

Examining this through the lens of critical posthumanism, the merging of humans and technology serves to re-evaluate the traditional concept of human identity, as established during the Enlightenment era. By examining the integration between humans and technology, critical posthumanism challenges long-standing beliefs about human nature, identity, and superiority, offering new insights for understanding our place in the world and our relationships with other beings and the environment. This understanding is encapsulated by the concept of posthuman.

The idea of a posthuman subject, for critical posthumanists, is not just a thinking mind but also an embodied, connected being. This view challenges traditional ideas of human superiority and emphasises the importance of considering our relationship with nature and other living beings. The posthuman subject of critical posthumanism, different from the transhumanist understanding of the posthuman figure, is based on the idea that matter is intelligent and self-organizing, and that our minds and bodies are deeply connected. Moreover, subjectivity is not limited to individuals but is a cooperative, trans-species effort that takes place in between various dichotomies. The posthuman turn materializes this approach, creating a new framework for understanding the process of "becoming-subjects" (Braidotti, 2013, p.132).

Building upon this foundation, Cary Wolfe (2003) provides a critical evaluation of the foundations of liberal humanism and the distinctions it establishes between human beings, shaped by Western ideologies, and other life forms. Wolfe (2003) examines this issue by highlighting discussions in humanities and social sciences, even when addressing various forms of discrimination, including racial and gender, often fail to step outside the bounds of speciesism (p. 1). He suggests that despite strides in popular culture towards recognising the limitations of subjectivity solely to humans, academic studies in literature and culture remain influenced by a species-centric viewpoint. He critiques this Western-centric humanism for its binary division, positioning humans against animals. He argues that our ideals of human liberty - ideals that should embrace all regardless of race, class, or gender - are paradoxically built on the dominion over and using nonhuman entities (p. 1).

Further, Wolfe (2003) emphasises the role of science and technology in challenging the traditional view that subjectivity is exclusive to humans. He is particularly interested in the ethical implications of how we regard nonhuman beings and advocates for a post-anthropocentric view of subjectivity. He asserts that sharing the Earth with nonhuman subjects necessitates a posthumanist perspective, which does not signify overcoming or debunking humanity but rather calls for heightened awareness, accountability, and modesty in the face of a differently populated world (p. 1).

Wolfe's arguments extend to questioning the very foundations of subjectivity, encouraging the dismantling of anthropocentric ideals rather than eliminating humanity itself. He also questions the traditional notion of personhood and suggests reevaluating the concept to foster a deeper understanding of subjectivity.

Wolfe (2010) further delves into this new reality, where humans are no longer the sole proprietors of subjectivity. He contends that posthumanism provides an opportunity to reconfigure our understanding of who and what may be considered a subject worthy of ethical consideration. It is argued against seeing nonhuman animals as deficient versions of humans. Instead, it advocates for recognising the varied capacities that constitute subjectivity, "such as language and culture" (Wolfe, 2010, p. xv) - qualities that have traditionally separated humans from other beings which Cora Diamond, as cited in Wolfe, refers to as "fellow creatures" (Wolfe, 2010, p. 62).

Incorporating insights from neuroscience, cognitive science, ethology, and field ecology, Wolfe challenges the conventional distinctions between humans and nonhuman animals. He highlights that attributes like language, consciousness, and complex behaviours are not exclusive to humans, thus questioning the justice and moral standing of nonhuman animals amidst practices like cross-species transplantation and pharmaceutical testing (Wolfe, 2003, 2010).

Adrian Tchaikovsky's *Dogs of War* resonates profoundly with the thematic essence of posthumanist and transhumanist discourses presented by theorists such as Ranish, Sorgner, Bostrom, Braidotti, and Wolfe. The novel delves into the concept of transcending human biological limitations through technological advancements, which resonates with the principles of transhumanism. Through the bioforms, genetically engineered beings designed for specific purposes like warfare, Tchaikovsky showcases Bostrom's idea of humans being "a work-in-progress" (Bostrom, 2005a p. 4) and capable of evolving into posthumans with superior abilities.

The novel also delves into the complexities of non-human consciousness and the ethical considerations surrounding human technological advancements and their impact on other sentient beings. Tchaikovsky's narrative embodies a critical posthumanist approach by exploring the evolving identity of its bioengineered bioform characters, with a particular focus on the protagonist, Rex, a genetically modified creature created for warfare.

Dogs of War effectively challenges the human-centric view by introducing non-human characters that question traditional ideals of subjectivity and ethical consideration. The characters' journey echoes Wolfe's call for a re-evaluation of subjectivity beyond human beings, presenting a world where non-human entities can possess agency and subjectivity. The novel does not just imagine the posthuman condition but also vividly illustrates the potential for non-humans to exhibit traits such as language, culture, and complex behaviours, which Wolfe asserts are not exclusively human attributes (Wolfe, 2010, p. xv).

Tchaikovsky's portrayal is in line with Braidotti's postanthropocentrism, challenging the notion of human superiority and species hierarchy (Braidotti, 2013, p.61). Through this lens, the novel serves as a narrative experiment in exploring the posthuman condition, as Wolfe's theoretical framework suggests. The boundaries between human and non-human are not only blurred but also thoroughly examined and redefined.

Discussion of the Transhumanist Technologies in the Novel

Literature often reflects real-world technological pursuits, capturing societal shifts and expanding upon them within fictional narratives. *Dogs of War* by Adrian Tchaikovsky exemplifies this literary reflection, offering a fictional yet conceivable exploration of transhumanist ideas in a military setting. The novel transcends historical animal roles in combat by introducing a visionary concept of “bioforms” - synthetic beings that merge human and animal traits through genetic engineering. These bioforms represent a futuristic leap similar to the advancements seen in military research, yet they also pose philosophical questions about the nature of such technology and its impact on society.

The novel is a portrayal of the convergence of biology and technology. In the novel, the bioforms - Bees, Honey, Dragon, and Rex - are embodiments of the transhumanist vision. In addition, they show us exactly what it might look like if humans use technology to go beyond natural abilities. These characters are not just better at what they do; they show the main ideas of using technology to improve living beings, which helps us think more about what these technologies mean for the future of fighting in wars and the soldiers themselves. For instance, the bioform known as Bees is an example of collective artificial intelligence. Despite their appearance being deceptively similar to ordinary bees, they represent a singular, unified entity. This is highlighted when one of the characters in the novel observes the swarm and remarks on their resemblance to the natural insect, only to be corrected that they should be referred to as a single “She, singular” (Tchaikovsky, 2017, p. 50) emphasising their unity. Bees, as explained by Murray with a semblance of restored good humour, may not excel in abstract thought or strategic planning, but the bioform's prowess in combat and reconnaissance is unparalleled. Each bee unit works in cooperation, hatching from accelerated pupae to form an intricate network of intelligence, truly a marvel of bioengineering. The bees are a form of bioengineered insects designed as weapons. Bees' unit has various poisons; her favourite is the one that “makes the enemy go mad and fight each other” (Tchaikovsky, 2017, p. 5).

Honey, which has the shape of a bear, is also an integral component of the team, providing heavy weapons support and excelling in close combat scenarios. Seated, Honey's size surpasses that of any man standing, a visual testament to the power and potential violence inherent in this bioengineered being. Yet, Honey's role is not purely aggressive; it is a calculated part of a larger strategy, a balance of force and protection within the group's diverse capabilities (Tchaikovsky, 2017, p. 50-51).

Basking in the sunlight, Dragon exhibits a unique biological architecture, extending a length of twenty feet from a snout resembling that of a crocodile to the tip of a slender, whip-like tail. The creature's scales, a muted brown indicating a state of relaxation, hint at his ability to change, suggesting a level of complexity beyond his present appearance. With a physique less reminiscent of human form compared to the other bioforms - save for somewhat “man-like” arms - Dragon embodies a striking fusion of various reptilian traits. His lineage, drawn from anoles and monitor lizards, is evident in his sinuous form and the turret-like chameleon eye that tracks movement with predatory precision (Tchaikovsky, 2017, p. 51).

Rex, with an impressive height of almost seven feet eight inches, is an armed and bulletproof bioform engineered to be a “good dog” obedient to its Master's commands (Tchaikovsky, 2017, p. 5). He can stand up on two legs to use his human-shaped hands (Tchaikovsky, 2017, p. 5). His muscular structure is exceptionally robust, composed of impact-resistant fibers within his skin and his bones are hollow, yet possess strength comparable to titanium (Tchaikovsky, 2017, p. 21). Rex is a prime example of

transhumanist thought manifesting in the realm of bioengineering. He is not merely a dog but a bioform with advanced cognitive and physical abilities, designed to follow commands and partake in military operations to fight for human. "He can pick up explosives, drugs, guns, vehicles, people; he can tell if he is being lied to; he can even pick up certain diseases or medical conditions" (Tchaikovsky, 2017, p. 35). "Rex could bench-pressed well over a ton, but he had the muscular control of a surgeon" (Tchaikovsky, 2017, 24). He has heavy artillery on his shoulders - called "Big Dogs" (Tchaikovsky, 2017, p. 3) which are activated through Rex's command so that he can use his hands for other tasks. Those artilleries are so big that only a bioform like Rex could carry and use because "humans are too little to use them without hurting themselves" (Tchaikovsky, 2017, p. 3).

As seen in the quotation, the adoption of transhumanist technologies in the novel is driven by the objective of reducing the impact of human vulnerabilities in combat scenarios. This encompasses a range of human aspects, including the unpredictable nature of emotions, the susceptibility to errors, and the innate physical restrictions that human soldiers face - notably, the ultimate limitation of mortality. Therefore, it is important to consider how these technologies could make soldiers safer and more effective.

In the realm of military strategy, the assimilation of transhumanist technologies marks a pivotal expansion of biotechnological applications. The advancements signal a paradigm shift, significantly altering the conduct of warfare, reshaping international relations dynamics, and redefining the geopolitical landscape. Key to this evolution is military research, which is imperative for developing sophisticated weaponry that affords a tactical advantage in combat. Historically, military has employed animals for various purposes, including detecting explosives, tracking enemies, and performing tactical manoeuvres. In his scholarly article "Romancing the Bomb: Marine Animals in Naval Strategic Defence", Terril Ceiridwen (2001) highlights animals' significant roles in military operations. It is pointed out that animals such as elephants, dogs, and rats have been particularly valued for their acute sensory capabilities, while marine animals like dolphins and sea lions have conducted naval tasks, including mine detection and clearance, enemy submarine neutralization and harbour protection (Ceiridwen, 2001, p. 106-109). On a different note, a biomedical scientist named Ian Murnaghan, on a website dedicated to discussing animal testing, mentions other animals like pigs are utilised in the development of weapons and defensive tactics, such as testing the effects of nerve agents, chemical burns, and physical trauma from explosions and bullets; improving surgical procedures for the medical care of injured military personnel, in creating vaccines against potential diseases soldiers might encounter or to test endurance against physical attacks and challenging combat environments (Murnaghan, 2017).

The use of animals extends beyond traditional roles, as exemplified by the CIA's Acoustic Kitty project during the 1960s. This project aimed to use cats for espionage within the Kremlin and Soviet diplomatic missions (Krishnan, 2016). According to Krishnan (2016), these cats underwent complex surgical procedures, including the implantation of microphones and transmitters; however, the project's first mission ended tragically when the cat was hit by a taxi shortly after being released, but that did not stop scientists and Intelligence Agencies from using animals in their military projects (p. 34).

The practical applications of transhumanist principles in military contexts have historically included various animal-based operations, from using elephants and dogs to more modern endeavours like the Acoustic Kitty project. These real-world instances provide a stark backdrop to our understanding of bio-enhancement and its ethical implications.

The bioforms in *Dogs of War*, with their enhanced cognitive and physical abilities, stand as exemplars of transhumanist aspirations. Rex, for instance, epitomises the pinnacle of physical augmentation, with his bulletproof skin and super-dense muscles, reflecting the transhumanist pursuit of surpassing human biological limits. His advanced cognitive functions, capable of intricate decision-making and understanding complex commands, parallel the transhumanist goal of significantly expanding the human intellect. Similarly, the collective entity of Bees represents a leap in collective intelligence, a concept that resonates with the transhumanist vision of shared and amplified cognitive processes. The Bees' ability to operate as a unified consciousness echoes the transhumanist ambition of transcending individual cognitive limitations and exploring new forms of intelligence that are distributed and cooperative. These align with the concept of using advanced biotechnology and genetic engineering to modify and enhance biology, which is a key aspect of transhumanism.

The bioforms represented in the novel are a narrative exploration of transhumanist possibilities. They stand at the frontier of a new era where the augmentation of living beings through technological means redefines the parameters of life. These creations are a testament to the transhumanist ideology in action, showcasing what might be possible when science pushes the limits of the natural world. In Tchaikovsky's vision, the bioforms are the pinnacle of this pursuit, embodying the strength, intelligence, and resilience that transhumanism seeks to achieve.

Discussion of Critical Posthumanism in the Novel

The narrative delves into the contentious position of transhumanism within the broader intellectual discourse on human evolution and technology, juxtaposing the optimistic aspirations of transhumanism with the ethical dilemmas presented by critical posthumanism. The inherent anthropocentrism within transhumanist thought suggests new power structures and scrutinizes the potential militarization of transhumanist technologies, prompting significant ethical and moral debates.

The distinction between humans and non-humans has been a subject of long-standing debate, with Western culture traditionally placing human reason and autonomy above other forms of life. This notion stems from humanist thinking, as elaborated in Başak Ağin's book *Posthümanizm: Kavram, Kuram, Bilim-Kurgu* (2020). For Ağin (2020), although the origin of the anthropocentric viewpoint is often attributed to the Age of Enlightenment, it is possible to trace the roots of this thought back to Ancient Greek philosopher Protagoras' (ca. 490–420 BCE) assertion that "Man is the measure of all things" (as cited in Ağin, 2020, p.39). This idea highlights the capacity of humans to comprehend and exert control over everything in the world. Throughout history, humans have consistently perceived themselves as distinct from nonhuman beings, attributing traits such as reason, morality, and consciousness exclusively to their species.

According to Braidotti (2013), the difference between human and non-human transcends the mere construction of the human notion, but it has also shaped the culture and ideology of western civilizations and led to the establishment of a hegemonic mindset known as Eurocentrism (p.14-15). This mindset prioritises a specific group of humans who align with the "legal codes of the modern West" (Braidotti, 2013, p.15) and marginalizes those who do not. This group includes individuals from diverse ethnicities, races, genders, people with disabilities, and animals that fall outside their definition of the human. Thus, they are "reduced to the less than the human status of disposable bodies" (Braidotti, 2013, p.15). Within the catalogue of marginalized entities, bioforms also find their place, especially in the context of *Dogs of War*.

In this context, where transhumanism extends the principles of Humanism, humanity is not merely at the centre of everything, but also tends to exploit any possible living or non-living being as a resource for their ambitious pursuits. The novel continually reflects the subordinate status of bioforms for human benefits as can be seen when the human master of the bioform unit explains their choice of animal as soldiers for warfare in the first place: "They come in a half-dozen different breeds, with more on the way, each tailored to a particular role. And they're not human; they have no rights" (Tchaikovsky, 2017, p. 34) he explains.

This commodification is further underscored when the Master and others discuss terminating the bioforms when they are no longer of use, regarding them as "disposable" and asserting that it is "cheaper and easier to breed new ones" (Tchaikovsky, 2017, p. 64). The stark reality of this commodification is laid bare in the Master's ruthless admission: the loss of canine lives is merely a means to an end. "It had cost them a lot of dogs. But then you could do to dogs what you could not do to man: You could make them superhuman, give them all the advantages they would need to rule the battlefields of the future. All you need was sufficient dogs and no real qualms about how many you ruined before you got it right" (Tchaikovsky, 2017, p. 24). Such perspectives in the novel expose the dark side of transhumanist aspirations - the moral costs of relentless pursuit of supremacy and the readiness to sacrifice countless lives in the process.

Transhumanism extends the anthropocentric viewpoint, often exploiting living and non-living beings for human ambition. The novel presents bioforms as subordinate entities, valued not for their sentience, but for their utility in warfare. In the novel, bioforms are created not for their intrinsic value as sentient beings, but for their utility to humans, particularly as weapons of war. They are perceived as commodities to be used and discarded when they no longer serve their purpose, exemplifying anthropocentric thinking.

The novel thereby critiques the anthropocentric and capitalist calculations at the heart of transhumanist military endeavors: the bioforms are perceived merely as commodities, created and discarded based on their usefulness in warfare. The cost-effectiveness of using bioforms like dogs becomes apparent when they are reduced to "disposable" (Tchaikovsky, 2017, p. 64) objects, and when their existence is denied. It is more economical to breed new bioforms than to invest in the extensive training and equipment required for human soldiers (Tchaikovsky, 2017, p. 34). Additionally, the absence of "grieving relatives when they died" (Tchaikovsky, 2017, p. 126) further underscores their utilitarian value. The use of bioforms in human conflicts and their subsequent confinement in remote facilities not only reflect the utilitarian and economic motivations of corporations influenced by transhumanist ideology, but also highlight the binary and exploitative nature of these ideologies, which are fundamentally grounded in an anthropocentric worldview.

In the novel, the Master who commands the bioforms fails to understand the other people's compassion towards Rex, believing that such a genetically engineered creature should be primarily valued for its economic potential. The lawyer advocating Rex's right at the court asserting "Something that thinks and feels like a human, so deserves some sort of recognition, some sort of basic rights" (Tchaikovsky, 2017, p. 168); however, "they are going to exterminate them" (Tchaikovsky, 2017, p. 162). As demonstrated by prevailing attitudes in Western society towards genetically engineered animals and mirrored in Master Murray's human-centred stance, the well-being and requirements of such beings often take a backseat when human interests are involved. In this sense, the bioforms in *Dogs of War* can be defined as the

other, becoming the mere examples of the victimization process perpetuated by transhumanist corporations.

By rejecting the idea of human exceptionalism and the dominance of humans over other life forms, posthumanism, which, according to Rosi Braidotti (2013), advocates for “an enlarged sense of inter-connection between self and others, including the non-human and ‘earth’ others, by removing the obstacle of self-centred individualism.” (p.49-50). This perspective encourages us to reconsider our relationships with other life forms and the environment, promoting empathy, collaboration, and sustainable practices. This exploration underscores the complex interplay between these philosophical perspectives. That is to say, while posthumanism suggests a position that challenges the primacy of humanity and blurs traditional distinctions, transhumanism in the novel shows itself as yet another binary formulation.

A genuine understanding of posthumanism necessitates the recognition of biotech entities as unique individuals. This recognition entails accepting all aspects of their existence, whether they are a product of natural biology or genetic engineering. In the novel, the role of Rex in facilitating our comprehension of the interplay between biology and technology is emphasised as a means to understand the inherent connection within the framework of posthumanist thought. Within this context, it becomes imperative for us to consider both the biological aspects, in terms of biology and species, and the ethical dimensions when redefining what it means to humans in the context of posthumanism.

In *Dogs of War*, the crucial turning point occurs when Bioforms display intelligence, some cognitive capabilities and empathy. A notable instance is during a mission when Honey, a bioform part of Rex's unit, stops shooting because people they encounter are civilians who are scared. Honey says: “scared humans may do many things including attack us. Does that make them enemies just because they are scared?” (Tchaikovsky, 2017, p. 42). This pause in aggression stems from an emerging cognitive empathy; Honey contemplates the nature of fear and its implications, questioning whether the mere presence of fear in humans justifies their classification as enemies.

At another time, following the deactivation of an implant that enforces obedience, Rex begins to internally debate the morality of the commands issued by Murray, his mercenary leader. These moments of reflection are encapsulated within the internal monologues that take place in Rex's cybernetic skull, where he ponders the ethics of warfare and the criteria that define an enemy.

Rex's introspections are particularly evident when he contemplates the link between the presence of weapons stored in the tents at a camp they came across and the potential enemy status of the individuals there, a status that will be determined based on whether those humans attack them. His reflection challenges the binary thinking imposed by his previous programming:

There are many, many tents here, large and small, with many humans all around them. The tents could be storing weapons. We will have to check each of them. If we find weapons, does that make these humans enemies? There should be a link between these things but other humans without weapons have been declared enemies by Master. (Tchaikovsky, 2017, p. 41)

As indicated in the quotation above, Rex's introspection disrupts the programmed dichotomies of friend and enemy that have been ingrained in him. This represents a significant moment of cognitive dissonance and emerging autonomy as Rex starts to question the rigid classifications set by his creators. His reflection signifies the emergence of a moral compass that extends beyond the simplistic binary code of his programming, indicating the formation of ethical reasoning.

Rex's evolving understanding aligns with Wolfe's posthumanist critique of speciesism and Braidotti's postanthropocentric principles. These emphasise the importance of transcending the narrow definition of human and challenging established norms of identity and subjectivity. Rex's questioning indicates his move towards a posthuman subjectivity, where his self-awareness and moral considerations transcend the limitations of his design.

Another example illustrating Rex's capacity for autonomous decision-making arises when Rex and his companions take on the role of guardians. They defend the civilian residents of a village against the corporate soldiers who are determined to erase evidence of atrocities committed in Mexico. In doing so, the bioforms demonstrate a stark deviation from their initial programming, exhibiting self-awareness and an independent moral compass.

Surpassing the "design parameters" (Tchaikovsky, 2017, p. 240), which are the predetermined behaviours that humans have programmed into the augmented animals, expecting them to act solely based on these predefined traits without recognising their own agency, challenges the human-centric belief system that places humans above all other forms of life, while marginalising everything that is not human. Through these events, *Dogs of War* interrogates the core of transhumanist pursuits - questioning where the line is drawn between obedience and morality and how artificial intelligence may intersect with the human concepts of empathy and ethical decision-making.

In a broader context, it can be claimed that these bioforms, which Braidotti (2005) refers to as "technologically enhanced body-machines", can be thought of as examples of Haraway's notion of the cyborg, which she describes as "a cybernetic organism, a hybrid of machine and organism" (Haraway, 1991, p. 149). The bioforms challenge entrenched politics that normalise binary oppositions, which are culturally produced, as well as established power structures and interests. Through characters like Rex, the narrative highlights the necessity of recognising biotech creatures as unique individuals within a posthumanist understanding.

In the novel, the delineation between animality and humanity is not just blurred, but significantly dissolved, challenging the conventional ontological divisions of human and animal. This depiction disrupts the entrenched anthropocentric perspective that has long privileged humans as the central, independent, and foundational beings, necessitating that all other entities be understood in relation to them. Such a portrayal creates a path for recognizing the agency of non-human entities by undermining the notion that humans are uniquely autonomous or disembodied entities within the universal order.

This is further reinforced by the bioengineered characters within the story, who embody the "enthraling promises of possible re-embodiments and actualised differences," and their "Multiple, heterogeneous," nature always carries with it "multiple virtual possibilities" (Braidotti, 2006, p. 204) suggesting a profound reconfiguration of beings. These human-animal hybrids, cybernetically enhanced and human-like in their actions, represent a deconstruction of the established concept of the human. Within this speculative future in the novel, the question of what it means to be and to become takes on new significance, pushing us to reconsider the essence of our being and the future of our existence in a world where the lines separating the technological and biological domains are becoming more blurred.

Acknowledging their unique identities means fully accepting all aspects of their existence, be it biological or genetically engineered. Through Rex, it is evident that posthumanist understanding necessitates us to recognise biotech entities as separate individuals and to re-evaluate our definition of human.

In the novel, the emergence of bioforms with advanced capabilities, such as Rex, presents a growing discomfort for humanity as well. As these beings display traits and levels of consciousness eerily similar to those of humans, which blurs the lines between human and animal, they elicit a sense of existential threat. As these bioforms become increasingly complex and harder to categorize, the sense of unease amongst humans escalates. The more these creatures demonstrate sophisticated and sentient actions, the more humanity finds itself grappling with a sense of threat. These bioforms, designed to be wild and lacking agency, are now exhibiting behaviours that suggest a depth of awareness and intelligence that are believed to exist only in humans. This progression not only challenges the very definition of humanity, but also stirs a profound existential threat as humans confront the reality of sentient beings beyond their own species. The author's portrayal of bioforms speaking and exhibiting human-like intelligence raises questions about agency and autonomy, which, according to Başak Ağın (2012), resonates with Julia Kristeva's concept of abjection.

Abjection describes the emotional response that arises when the boundary between the self (subject) and the other (object) becomes blurred. It is unsettling because it reminds individuals of a time before they understood their individual identity, resulting in both fear and identification with the source of this feeling. It opposes the sense of "I" or identity and threatens our understanding of ourselves. In simpler terms, humans often fear what blurs the line between the familiar and unfamiliar, particularly in the context of defining their identity (Ağın, 2012).

After being locked in barracks, Rex says that the guards fear them most when they talk. He says, "To talk is human: why are we more frightening when we are human than we are dog?" (Tchaikovsky, 2017, p. 165). This shows bioforms, like Rex, exist in an in-between state – neither purely animal or human. They possess heightened intelligence and human-like qualities, but they are still, in essence, animals modified for warfare. This in-between state can evoke feelings of abjection as they blur the lines between the familiar and the unfamiliar, challenging our clear categories of "human" and "non-human." The abjection felt towards the bioforms might also stem from the fear of them gaining agency and autonomy. As they are designed to be tools of warfare under human command, the idea of them rebelling or acting on their own could lead to a threatened breakdown in the human-animal hierarchy, aligning with Kristeva's ideas of a disruption in the distinction between subject and object (as cited in Ağın, 2012).

However, it is of utmost importance to clarify that neither posthumanist scholars nor Tchaikovsky subscribe to a technophobic viewpoint that fears or condemns technology; rather, they are critical of the intentions and contexts within which technology is developed and used. Their concern is with "how" and "why" technology is applied, and the social, political, and ethical dimensions of its integration into human life.

In the novel, the application of technology, particularly in the creation and utilization of non-human bioforms, is depicted with a dual edge. While technology itself is not demonized, the novel does portray the distressing consequences that can arise when technological advancements are employed without ethical restraint, especially regarding non-human entities. The character of Rex, a bioform, becomes a symbol of the boundary dissolution between human and non-human, organic and synthetic because Rex embodies the convergence of human, animal, and machine. Through Rex, Tchaikovsky illustrates a key posthumanist concept: that the essence of life and intelligence is not confined to organically born humans but can extend to artificial life forms created through technological means.

Yet, the exploitation of technology by corporations for malicious purposes gives rise to numerous ethical issues. In the novel, bioforms are manufactured for specific roles, often for combat or other forms of servitude, which exposes them to violence, exploitation, and a denial of autonomy. They are designed to obey, fight, and die without consideration for their experiences or the potential for suffering they may endure as sentient beings. These beings are believed to be expendable and disposable from the perspective of their human creators. When their usefulness is deemed to have ended, they are often terminated or abandoned without regard for their sentience. This reflects a concerning aspect of transhumanist ambition, where the pursuit of enhanced capabilities leads to a disregard for the intrinsic value of life that does not conform to the human norm.

However, it should be emphasised that the monstrous manifestations of the bioforms within the story are products of human action, echoing a Frankensteinian narrative, a term appropriated by Bruno Latour (2011) who posits that

..., we also misunderstand Dr. Frankenstein's real sin.

For Dr. Frankenstein's crime was not that he invented a creature through some combination of hubris and high technology, but rather that he abandoned the creature to itself. When Dr. Frankenstein meets his creation on a glacier in the Alps, the monster claims that it was not born a monster, but that it became a criminal only after being left alone by his horrified creator, who fled the laboratory once the horrible thing twitched to life. (Latour, 2011, p.19)

In the narrative of Dr. Frankenstein, the sin is not merely the act of creation itself, a blend of overreaching ambition and advanced technology, but rather the neglect and abandonment of the created being. This theme extends beyond the confines of the story, resonating with the broader ethical considerations of our responsibilities towards our creations, whether they should be technological advancements or other manifestations of human ingenuity. Often, we find ourselves in a position where we hastily cast blame upon the creations themselves - be it artificial intelligence, industrial machinery, or any other product of human innovation - for the challenges and dilemmas they present. Latour suggests that our failure lies not in our act of creation, but in our failure to responsibly manage, guide, and nurture them.

The tale of Dr. Frankenstein and his creature serves as a significant allegory, urging us to consider the moral obligation we bear towards our creations. Just as the creature was not inherently monstrous, but was rendered so through neglect and isolation, our technologies and innovations may pose risks not because of their inherent nature, but due to our lack of engagement, understanding, and ethical stewardship over them.

As we delve deeper into the analysis, Latour's insight becomes increasingly relevant. The novel depicts the themes of desertion and the subsequent destruction of animal lives at the hands of their human creators, which swell to monstrous magnitudes. These themes serve as a grim reflection of our societal behaviours towards technology and nature. The story serves as a cautionary tale, warning of the grim consequences that arise from humanity's inclination to create and then forsake, not just technology, but the very essence of life that technology has been intertwined with. The narrative, through its posthumanistic framework, underscores the ethical imperative to care for and coexist with our creations, whether they should be technological or biological, to prevent a future marred by the monstrosities of our own making.

Conclusion

Transhumanist delineation of non-human bioforms, regulated by a dualistic logic, emphasizes the prevailing belief that non-humans are fundamentally different from humans and, as such, not entitled to equal rights. Therefore, bioforms are relegated to the role of "disposable bodies," (Braidotti, 2013, p.15)- a term that serves to benefit humanity - and it is reflective of an exclusionary agenda within transhumanist thought.

Master Murray's depictions of Rex, the bioform dog, as inherently dangerous and wild is a direct manifestation of the violence against bioforms, a recurring theme in the novel. This portrayal not only exemplifies a hierarchical view of life forms, but also directly challenges posthumanist discourse which seeks to dismantle such hierarchies. The novel thereby aligns with the posthuman ethos as articulated by Francesca Ferrando who suggests that "[p]osthumanism offers a theoretical invitation to think inclusively, in a genealogical relocation of humanity within multiversality...and alterity within the self..." illustrating that there are "alternative human embodiments" (Ferrando, 2014, p. 220).

In the novel, Tchaikovsky vividly illustrates these "alternative human embodiments" (Ferrando, 2014, p. 220). through characters like Rex, who, despite his non-human origins, exhibit traits and emotions typically associated with humans, thus blurring the lines between human and non-human entities. This novel not only critiques the limitations of humanism and anthropocentrism but also serves as a storytelling mechanism to explore aspects of existence that are quintessentially human yet extend beyond our traditional understanding. These include the emergence of complex online identities and the concept of 'Homo cyberneticus' (Ferrando, 214, p. 220) - a new hybridization of humans and technology that challenges our preconceptions about agency, consciousness, and the essence of life itself.

By showcasing the intimate bond between Rex and his human companions, the novel provides "a new way of understanding the human subject in relationship to the natural world in general" (Bolter, 2016, p. 1) and "a new epistemology that is not anthropocentric and therefore not centered in Cartesian dualism" (Bolter, 2016, p. 1), such as nature/culture, human/animal, and the like (Bolter, 2016, p. 1).

Through its narrative, *Dogs of War* interrogates the prevailing hierarchy of beings, presenting a compelling case for re-evaluating the ethical frameworks that govern our interaction with beings that are both like and unlike us. It invites readers to consider a future where the lines between human and machine, organic and synthetic, are blurred, signalling a new understanding of life in the posthuman era.

Dogs of War serves as a timely reminder that our vision of a transhuman future must incorporate ethical considerations, checks and balances, to ensure that technology serves the betterment of all sentient beings, rather than reinforcing existing power structures. It underscores the urgency of engaging in critical discussions about the moral and ethical implications of advanced technology in shaping our future.

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