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**Transhumanism and Transhuman Body in Jeanette Winterson's
Frankissstein: A Love Story (2018)
MA thesis**

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ABSTRACT

Just like at the beginning of the 19th century, in the 20th and 21st century the advancements in technology have led to the increase of science fiction that deals with the ethical concerns related to humanity and human life. Mary Shelley *Frankenstein* in 1818 questioned who is able to create life and how. Jeanette Winterson rewrites these topics in her novel *Frankissstein* and puts the question of human life and the human body into dialogue with transhumanist philosophy and transgender embodiment. Because of this, the thesis aims to find out how transhumanism and different transhuman bodies are portrayed in Jeanette Winterson's *Frankissstein: A Love Story* (2018)

The introduction discusses the timeliness of posthuman and transhuman thought, and examines Shelley's motivation for writing *Frankenstein*. It also shows how Winterson reworks Shelley's novel and introduces the reception of Winterson's novel and, how posthumanism, transhumanism and feminism overlap and interact in the novel.

The theoretical chapter, which consists of five subchapters, develops the theoretical basis for the thesis. The first subchapter examines the notions of posthumanism and transhumanism, and shows how the terms will be used in the thesis. The second subchapter concerns the notion of the cyborg and introduces Donna Haraway's cyborg and its potential. The third subchapter considers the different forms a transhuman body could take and how it could be achieved. The fourth subchapter continues discussing the body as the basis of embodiment, as well as explaining how gender is a part of embodiment. The fifth and the final subchapter offers a short discussion of the previous topics.

The empirical chapter consists of three subchapters – the methods subchapter introduces the reader to close reading and reading with the grain, the second subchapter is a summary of Jeanette Winterson's *Frankissstein* and the third subchapter provides the analysis of the novel, with attention to different forms of bodies that appear in transhumanism, and prolonging, reanimating and recreating such transhuman life. These bodies include the brain as central to the body, artificial intelligence as a new life form, sex robots and their artificial bodies and transgender bodies.

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INTRODUCTION

The end of the 20th and the beginning of the 21st century have been marked by an increased discussion about the meaning of humanity and its relationship with our environment. Concerns about the Anthropocene, climate change, quick development of technology and the related erasure of the human-machine distinction have made people wonder what is next for humanity, along with different fears about progress or the future in general. As a result, posthumanism and transhumanism have become hot topics in the last half of the century. Posthumanist discourse raises the question about what the nature of life is, which sort of bodies matter and who can create life. Transhumanism, regardless of whether we view it as its own strand of thought or the intensification of some parts of posthumanism, focuses on the erasure of the boundary between the human and the technology.

Transhumanist and posthumanist thought can be seen in narratives that reflect concerns related to technological advancements, for example, about online interaction and artificial intelligence. Movies such as *Her* (2013), in which a man falls in love with artificial intelligence and *Blade Runner* (1982) with its sequel *Blade Runner 2049* (2017), which revolve around the question if bioengineered humans count as humans, as well as novels such as Ian McEwan's *Machines Like Me* (2019), which revolves around the story of an android and his/its owners, echo the worries about the increasingly blurry boundaries of humans and technology.

However, similar fears about rapid advancements in science and technology and fascination with humanity have arisen before. In the 19th century, during industrialisation, these fears led to the increased popularity of science fiction (Tymn 1985: 42). In the first part of the 19th century, more focus was put on what a human is and who can create life. Mary Shelley's *Frankenstein* (1818) was one of the first novels to show the creation of artificial life

and ponder on the ethics of such creation. Frankenstein's creature can be considered to have a posthuman body, composed of different parts of corpses and reanimated. Shelley's novel draws from the experiences of the fragility of biological life in her life – Shelley's own mother died when giving birth to her; additionally, during the time of writing *Frankenstein*, Shelley had lost one prematurely born child and she had to take care of her second child. At Lake Geneva, she and Percy Shelley were joined by her pregnant stepsister (Jansson 1999: viii). Considering this, Shelley tries to reimagine who should and could be able to create life and what such a created life is. Her work could be seen as an answer to the “problem” of the female body and its reproductivity, which often was controlled by the men in the woman's life, replacing the birthing mother with a man or father who, with great effort, creates life through the death of others. Feminist scholars have analysed *Frankenstein* since the 1970s and many of them see Shelley's life reflected in the novel. Most notably, Ellen Moers was the first scholar to bring attention to how Shelley's own guilt and dread about childbirth are answered in the novel. Other scholars such as Sandra Gilbert and Susan Gubar have also highlighted the inadequate parenting discussed in the novel. Mary Jacobus and Gilbert and Gubar furthermore assert that the novel reflects how Shelley herself was “unmothered” and had to raise herself just like the creature has to (Long Hoeveler 2003: 46–49).

Exactly two hundred years after the publishing of *Frankenstein*, Jeanette Winterson's *Frankissstein: A Love Story* reworks Shelley's story in light of new technological advancements. This is not the first time that Winterson reanimates an older piece of literature in an act of feminist rewriting, having rewritten Shakespeare's *The Winter's Tale* in 2015 as *The Gap of Time* and placing topics from the original into contemporary times. The king has been transformed into a hedge fund manager, but the story of violence against women and children remains the same. Rewriting literary classics has been a feminist tradition and Winterson's project is also feminist by nature. In her retelling of Shelley's work, Winterson

explicitly engages with the discussion of post- and transhumanism, as well as gender, through the topic of trans bodies. These issues have been inspired by Shelley's text, but are given new urgency within our contemporary debates. As the novel reworks both Shelley's novel and the story of how Shelley wrote it, often parallels with *Frankenstein* are brought out when analysing or critiquing Winterson's novel.

It is possible to say that through reanimating Shelley's text and combining it with narratives from Mary Shelley's own life (albeit through historical fiction) the novel is itself a sort of a hybrid reanimated "body" of writing. By applying the technique of feminist rewriting of a text that is two hundred years old and bringing it to the contemporary context, the old "body" is given a kiss of life. While Shelley's novel questions who can create life, what life even is and whether it is possible to rethink reproduction, Winterson's novel leaves out reproduction and instead discusses different forms of life, but she also moves from the creation of biological life to prolonging it and to the technological forms of artificial life.

The novel represents the fears and ambitions of today's transhumanist subject. The novel asks what is human and a human, the limitations of human abilities and if overcoming these is appropriate what happens to the human when technology develops. In some ways, the Anthropocene and anthropocentrism are criticised. In addition, the book is exploring not just the boundaries between human and non-human, but also the boundaries between sex and gender, male and female, man and woman. The previously rigid binary thinking has been slowly changing to include grey areas as well. The latter question links *Frankenstein* to Winterson's previous novels that have been extensively analysed through the perspective of gender and sexuality (see, for example, French 1999, Lindenmeyer 1999, and Palmer 2005). *Frankenstein: A Love Story* is linked to this previous corpus because of its interest in embodiment but it is now placed within the debate on transhumanism. In this novel, Winterson also combines science fiction with counterfactual history writing, mixing different

genres as she has done previously for example in *The Stone Gods* (2007), which also has strong science fiction themes.

Through the novel, posthumanism, transhumanism and feminism are put into a conversation with each other. Within posthumanism, feminist critique is, specifically, interested in cultural politics of (now posthuman) bodies and analysing how these bodies are affected by the impact of techno-embodiment and digital mediation (Åsberg and Braidotti 2018: 7). Feminist posthumanism tries to bring together the materiality of human embodiment, nature and technology while also questioning the anthropocentrism belief in technological advancements and categories that separate nature and culture and nonhuman and human (*Ibid.* 7–9). According to Åsberg and Braidotti, feminism is somewhat incompatible with transhumanism due to the latter's rigid dichotomy of mind and body that feminism (and especially posthuman feminism) has criticised (*Ibid.* 8). Winterson's novel can be read as taking up the feminist position in its juxtaposition of the techno-utopian fantasies of the transhumanist characters and their embodiment, as well as a contemporary trans character.

As *Frankissstein: A Love Story* is still very recent at the time of the writing, it has not yet been written about extensively in the academic context and this thesis will help fill this research gap. There have been, however, reviews in different newspapers. As expected, most, for example, Byers (2019), Lotz (2019) and Thomas-Corr (2019), compare Winterson's novel to Shelley's. Byers (2019) only juxtaposes the novels at the beginning, then goes on to highlight how Winterson's novel embraces hybridity between genres, past and the present as well as in the characters who see the future of (their) (human) bodies as similar but not quite. Overall, Byers (2019) describes the novel as “a fragmented, at times dazzlingly intelligent meditation on the responsibilities of creation, the possibilities of artificial intelligence and the implications of both transsexuality and transhumanism.”

Lotz (2019) comments on the intertextuality and interwoven structure of the novel as well as hybrid creatures and the hybridity of the novel itself that “exists, brilliantly and defiantly, on its own terms”. Lotz briefly discusses the transhumanist creatures and their creators that Winterson depicts in her novel, arguing that they are an object of criticism, but not condemnation.

Humanity and changing views about it are central to Thomas-Corr’s (2019) review, which discusses how Winterson is “reanimating” Shelley’s *Frankenstein* while staying true to the themes Winterson has been writing about for all her career: desire, transformation and meanings (un)written on the body. The hybridity of the novel, the setting and the characters are highlighted once again. Although most of the review praises Winterson’s work, Thomas-Corr also argues that because Winterson tries to synthesise so many subjects and so much work in the fields of AI and trans bodies “the attempt to graft them together feels laboured”.

As can be seen from the above discussion, media reception of Winterson’s novel has given considerable attention to the broader philosophical questions raised as well as issues that are central to this thesis, post- and transhumanism and the blurring boundaries of gender. The discussion of gendered and trans bodies through post- and transhumanist theories will also contribute to ongoing discussions in gender studies. As mentioned above, hybridity is one of the central themes of the novel where the trans body is viewed as a hybrid and perhaps even transhumanist. For these reasons, the question that this thesis answers is the following: How are different transhuman bodies portrayed in Jeanette Winterson’s *Frankissstein: A Love Story* (2018)?

This thesis consists of a theoretical chapter and an empirical chapter. In the theoretical chapter, the notions of posthumanism and transhumanism are examined, followed by a discussion of Donna Haraway’s cyborg theory and post- and transhuman bodies. The theoretical chapter ends with a brief examination of the transhuman embodiment. Discussion

about transhuman body and embodiment continues into the empirical chapter, in which Jeanette Winterson's *Frankissstein: A Love Story* will be examined. To better analyse the transhuman bodies and how Winterson both represents the possibilities of the body while also making fun of some of the possible advancements, the ways transhuman bodies can appear are divided into the following thematic subcategories: (re)creating life and prolonging it; reanimating certain body parts; the brain as the transhuman body; artificial intelligence as a new life form and technopessimism; sex robot as a new form of the artificial body; the trans body as transhuman body.

1. POSTHUMANISM AND TRANSHUMANISM

1.1 Posthumanism and Transhumanism

To better understand how Jeanette Winterson's *Frankissstein: A Love Story* (2018) engages with post- and transhumanism, it is important to distinguish these two notions and the discourses they entail. While both posthumanism and transhumanism have been discussed in philosophical and scientific circles for decades now (see for example Haraway 1985), these two terms have not acquired a unified meaning but have become entangled and are sometimes used interchangeably.

According to Bruce Clarke (2020: 91), posthumanism covers different philosophical theories that all seek to overcome the negative legacies of humanism. Posthumanism aims “to recover, empower, and bring into more just relation /--/ differences of gender, ethnicity, race, and class, and /--/ differences between human and non-human organisms and objects” (*Ibid.*). His idea is perhaps influenced by Patricia MacCormack (2009: 112), according to whom, posthumanism is “a direct challenge, not to the former human, but what it means corporeally and discursively to be, or more correctly to count as, human”. The traditional Western concept of the human opposes it to the non-human, in the sense of non-human animals and matter, and places the human above other animals and entities. For MacCormack, if humanism has put the human in the centre of the world, posthumanism brings attention to the limitations of such an anthropocentric worldview, the possibility of defining human as one corporeal entity, especially highlighting the mediations that happen between human life and technology and human and the non-human. According to this view, corporeally, people's bodies overlap with the non-human world. MacCormack (2009: 118), for example, writes how “beasts of burden are within our bodies rather than at the end of ploughs”, bringing

attention to how animal organ transplants (*e.g.* pigs' hearts) can be used to lengthen human lives.

Braidotti (2017: 20) talks about *bios*, which more narrowly is used to describe *anthropos* or the human life and the material and discursive life related to it, but also of *zoe* which is the “intertwined web of humans and nonhuman living matter”. *Zoe* is what posthumanism tries to bring more attention to – not excluding the human but also bringing attention to the non-human entities that influence what is human. *Zoe* focuses on the fact that the potential for the production of knowledge and the capability of thinking is not limited to humans but can be extended to all living matter and technological networks (*Ibid.* 21–22). For example, it has been said that different plants can communicate with each other and exchange information, even if humans are not able to comprehend what sort of knowledge is exchanged or produced. Similarly to Braidotti, Barad (Barad 2007: 32, quoted in Åsberg and Braidotti 2018: 6) has brought attention to *zoe*, this power that has life and resides in an entity, be it a human, a plant or an animal. All of these entities will become one life force that Braidotti (2017: 26) describes as “we are in this together but we are not one and the same”. Posthumanism in this sense shares the belief that human bodies and other entities in the world are connected in all sorts of ways.

Karen Barad furthermore argues that posthumanism refuses to accept the human-non-human distinction and instead analyses these rigid categories (Barad 2007: 32, quoted in Åsberg and Braidotti 2018: 6). In addition, posthumanism poses some other core questions: what (and who) counts as human and what as non-human; could (and should) the dichotomy of human/non-human be bent and adjusted; if life is so technological and virtual, can life and humanity be independent of the technology that seems to surround humanity (MacCormack 2009: 112).

This challenge to the autonomy and centrality of the human being is answered in another version of posthumanism that has been inspired by the increasing integration of technology into human life. One example of this strand of thinking is the work of Paul Sheenan (2015: 245–246) who argues that posthumanism refers to something that is not human, at least not fully – for him the human has been changed with the help of cybernetics or prosthetics.

The challenge that technology poses to our understanding of humanity has already been discussed earlier. Writing about the tests conducted by Alan Turing in 1950, which tested machine's ability to exhibit intelligent behaviour similar to humans and Hans Moravec's 1988 claim that machines can become human for practical purposes, Hayles (1999: xi–xii) claims that “[y]ou are the cyborg, the cyborg is you” (*Ibid.* xii). Technology has advanced to the level that it is impossible to tell apart human and machine thinking in some spheres of life. Many online services are today offered through the help of robot customer service agents which have replaced human interaction. Although this is mostly done to cut costs and there is usually one or a few human customer service agents available if the need arises, sometimes at a first glance (or for even longer) it is impossible to tell if the answers have been generated by a computer or have been written by a human.

According to N. Katherine Hayles (1999: 2–3), who discusses posthumanism in the context of technology as it has evolved, four core principles help understand the posthuman and posthumanism. As she speaks in the context of technology, her principles do not cover the human/non-human distinction and the discussion of how every living being is connected. Her first principle is concerned with informational patterns, seen as more important than the biological-material substrate. The second principle argues that the posthuman view sees consciousness not as the basis of human identity but just as a minor sideshow. Having consciousness does not make human the centre of the world as it can be argued that other

entities also possess a consciousness and therefore human consciousness is not anything special. The third principle concerns the body – the body is the first and original prosthesis that humans learn to manipulate; further prostheses applied onto the body are just the continuation of the process. The fourth principle is the most important for Hayles: human beings are configured to be able to integrate with intelligent machines. Such integrations can lead to the creation of the posthuman.

Posthuman signifies both a problem and a possibility for Hayles (1999: 5). The possibility and the problem both come from the way that a body could be changed – it is a possibility to embrace the technology while recognising the human but also a problem if embracing technology leads to being caught up with the unlimited power technology offers. Posthuman is very closely still related to the body and how the (human or non-human) body changes, which will be discussed in the following subchapters.

Transhumanism, in contrast to posthumanism which accepts that there are limitations to the human body and its existence along with other non-human living organisms, looks for an intermediary form of human and post-human, or a way to make the human body obsolete. For transhumanism, the human, especially the human mind is, however, still the most important part of nature and all of Earth. Clarke (2020: 92–93) regards transhumanism as one of the posthuman imaginaries, which discusses the transcendence of limitations of the human. He highlights how transhumanism sees further human evolution through technological prostheses on human bodies or genetic manipulations that radically transform the human phenotype. Geraci (2012: 579) describes transhumanism as a desire to overcome and change the human condition with the help of science and technologies. In a similar vein, Åsberg and Braidotti (2018: 7) claim that transhumanism is a form of posthumanism that wishes to overcome the body through the advancement of the mind or science.

This change of the human condition should lead to happier, healthier lives and can be achieved by integrating prescription medications, genetic engineering, computer implants or, in the most radical train of thought, uploading the human consciousness into virtual reality or cloud. According to Hefner (2009, quoted in Geraci 2012: 580), many people desire a longer, healthier life but choose different methods of achieving it. For example, people take vitamins even if these are not prescribed or follow medication routines to stave off sickness and to function better daily. Rizzuto and Fost (2012: 570) indeed agree that transhumanism sees sickness, ageing and death as burdens to overcome, either by medical or technological means, which could include prescription medications, artificial body parts and technological advancements that would enhance the abilities of humans.

Transhumanism's ultimate goal seems to be uploading brains into virtual reality and parting with the physical body. Moravec (1988: 117, through Geraci 2012: 582–583) believes that if the human mind simply consists of patterns of electrochemical activity, it should be possible to replicate the mind in another medium that can read electrochemical activity, for example, a computer. Hayles (1999: 12) discusses the same fantasy and hypothesises that because the human is mostly information, it will be easy to do away with the body. However, this leads to the question of the original and whether the uploaded-copied mind counts as human. Thweatt-Bates (2016: 54) highlights these concerns when discussing the Upload Scenario and asks if the uploading process is not destructive – if the original brain will exist alongside the uploaded copy, either in virtual or physical form, it is not clear who can claim ownership to property or the identity of self. This becomes important when discussing what is more important in the transhumanist circles: the combination of the mind in the body or just the mind, in other words, the original or the copy. This raises another ethical dilemma as to who has the personhood and all the rights that come with being a person – the physical body, the uploaded sequence of patterns or both. Further complications can rise if personhood and

the rights that come with it can be claimed by both the uploaded and the “original” flesh body or if obligations (such as debt) are added into the discussion.

Perhaps the question can be left unanswered without any further issues in some cases. If humanity will build robots that build even smaller, faster and smarter robots the building will eventually lead to one great superintelligence called Singularity (Rizzuto and Fost 2012: 570). By the creation of Singularity, humanity will be so used to robots and artificial intelligence that uploading the mind into the computer will cause no ethical dilemmas. However, Rizzuto and Fost do not raise the question of destructive or non-destructive uploading and therefore it is possible that even with one great artificial intelligence, for some time there will be (at least) two versions of a person – one that inhabits the physical body and the other that has been uploaded.

Although most transhumanist thought claims to be strictly non-religious, Geraci (2012: 585) argues that transhumanism is a variation of religious naturalism. Religious naturalism finds religious meaning in the natural world while rejecting the existence of a supernatural realm (Murry 2006). Murry (2006) claims that human beings are products of nature and natural causes. In contrast, transhumanism believes in supernatural entities that will guide human evolution. From religious naturalism, transhumanism takes trust in natural sciences, technology and medicine. Geraci highlights the ideas of immortality and happiness, which religion tries to achieve through religious practices and transhumanism through science and technology, calling the end goal of transhumanism “techno-salvation” (Geraci 2012: 585–587). Rizzuto and Fost (2012: 570), however, find that transhumanism is a philosophical movement that is guided by the highest ethical values and principles, without mentioning what these values might be. Cary Wolfe’s idea of transhumanism (2010: xiii–xiv) agrees with Rizzuto and Fost in seeing transhumanism as a philosophical movement. Bostrom (through Wolfe 2010: xiii–xiv) adds that transhumanism combines renaissance

humanism with rational humanism from the Enlightenment period. For this reason, Wolfe (2010: xiii) sees transhumanism as an intensification of humanism in that rationalism and critical reason, rather than religion, provide grounds for morality.

As can be seen in the discussion above, the notions of posthumanism and transhumanism are entwined in many ways. According to some theorists, transhumanism is one strand of posthumanist thought but there are also important differences, mentioned by many others. Posthumanism follows a more anti-humanist train of thought: the 'human' is no longer the crown of nature and instead of bios, which describes life in relation to the anthropos or the human, the notion of zoe, the ability of an entity to generate life-giving power, is getting greater attention. Transhumanism, in contrast, does not move away from the centrality of the human but even heightens its importance, by showing how technological development can lead to the advancement of human life, to either improve upon the physical body with cybernetic brain chips, prosthetics or other alterations or to move beyond human bodily boundaries. Posthumanism and transhumanism both move away from religion, even if some transhumanists strive for a (techno) salvation that would lead to the immortality of the human mind/soul by either providing immortality to the human/cyborg/altered body, to the soul or the human mind, which could be uploaded into the Singular great computer system.

Because of such similarities, posthumanism and transhumanism are often seen as extensions of each other or even almost the same thing. Cary Wolfe claims that transhumanism is just a strand of posthumanism that has based its whole movement around the image of the cyborg (Wolfe 2010: xiii). However, Wolfe (*Ibid.*: xv) also argues that his posthumanism is the opposite of transhumanism as the latter wishes to transcend the bonds of the materiality of human. His transhumanism is, instead, the intensification of humanism. Thus, transhumanism, with the help of technology or science and medicine, strives for the type of life that is conducted without the material human body. As a result, in his vision

Wolfe sees posthumanism as both before and after humanism: before because the embodiment of the human being is both in the biological and technological world, combining the “human animal” with tools and culture and language, and after because it is increasingly harder to ignore the decentering of the human and the Anthropocene (Wolfe 2010: xv–xvi).

Thweatt-Bates (2016: 41–42) believes that both posthumanism and transhumanism are umbrella terms for narrower schools of thought. However, she still includes transhumanism under posthumanism. Thweatt-Bates (2016) describes the different undercurrents of transhumanist thought in greater detail. In extropianism, the purpose is the expansion of life, and the elimination of limits to life, intelligence, freedom, knowledge and happiness with the help of science and technology. Democratic transhumanism or technoprogressivism focuses on democratically advocating for technological means to overcome the limitations of the human body. Hedonistic transhumanism aims for superhappiness or superintelligence through wireheading, genetic engineering and the use of designer drugs (short-term or long term). Singularitarianism is a strain of transhumanist thought that expects the emergence of one Singular supercomputer (Singularity) or artificial intelligence that should be friendly towards humans. Finally, the Upload Scenario that is briefly discussed offers different variations of how the human body becomes obsolete and what replaces it.

Ray Kurzweil (through Thweatt-Bates 2016: 54) believes that soon we will be able to create non-biological systems, artificial intelligence, that will match the “brain” power of regular humans and upload human intelligence patterns onto nonbiological substrates. Additionally, Kurzweil predicts the gradual augmentation of humans – first leading to cyborgism but ending with a complete replacement of biological with the non-biological matter. In my thesis, the strand of transhumanism that I will be mostly concerned with is what Thweatt-Bates describes as extropianism, as it is the narrow strand that strives for eliminating

the limits of life, which could be done by eliminating the limits of the physical body with the help of science, medicine and technology.

In the context of this thesis, the two terms will be used as follows. Posthumanism will be used to signify the philosophical movement that accepts that we are moving away from the anthropocentric worldview towards a worldview that Braidotti (2017: 26) has described as “we are in this together but we are not one and the same” as well as accepting that there are limitations to this (post) human body. The posthuman body can, for example, be a body of an android, a combination of animal-human or human-machine, i.a. cyborg body, which will all be discussed in the following subchapter. Transhumanism will be used to refer to the philosophical movement that above all aims to resolve the Cartesian wish to overcome the body through the rational mind, with the help of science, technology and medication. Therefore, the transhumanist body is the body that has been enhanced through medicine and science, the information that could exist in computers, or other artificial creations, through Singularity or not, or it can also be lines of code that make up the new genetics of a human.

1.2 Haraway’s Cyborg and Criticism

As can be seen from the discussion above, both post- and transhumanist theories have been fascinated by the question of the hybrid human-machine bodies. This issue is anything but new. The idea of the cyborg has been around since the 1960s, in which, according to Clarke (2020: 92) cyborgs were introduced as “man-machine systems”. For example, it was thought that pilots and astronauts needed to have cybernetic prostheses to aid them in space flight (*Ibid.*). However, cyborgs have also had an almost equally long history within feminist thought. One of the first feminist thinkers to find promise or new forms of being in the cyborg is Shulamith Firestone. In *The Dialectic of Sex* (1970), she discusses how the female cyborg would allow women to be relieved of the burden of childbearing and the functions of

a mother could be taken over by cyborgs or artificial wombs. Cyborg for Firestone symbolises a sort of reproductive freedom for women similar to what birth control offers while retaining the possibility of childbearing. However, even if Firestone brings cyborgs into the discussion, she does not develop a distinct theory for distinguishing between the human and the machine.

The concept of the cyborg was revamped by Donna Haraway who introduced the cyborg into the posthuman field of thinking as a hybrid creature in 1985 with her essay *A Manifesto for Cyborgs*. Haraway describes the cyborg as a hybrid of human, animal and machine, and social reality and fiction (Haraway [1985] 2004: 7). The ironic cyborg figure goes against gender dualism and challenges the separation of human, animal and machine (Clarke 2020: 92). For Haraway (2004: 10), cyborgs are the answer to the capitalism and militarism of the West; instead, she describes cyborgs as illegitimate but disloyal children of capitalism and militarism. Haraway claims that by the end of the 20th century we have become cyborgs through the combination of machine and organism (*Ibid.*: 8). Although Haraway does not fully define the cyborg as such, it seems that she sees cyborgs as women (*Ibid.*) at the end of the 20th century. This grows out from her observation that the idea that the construction of a universal “women’s experience” is not possible. As women’s experiences can be vastly different, there is no such thing as a universal experience of being a woman, and therefore fiction and reality meet in the experience of being a woman as the cyborg. Her idea that women should embrace technology could have also come from seeing that there was not much to gain from feminism leading women back to nature, and Haraway even claims she would rather be a cyborg than a goddess (Haraway 2004: 39). The idea that a person has to be defined only by their race, gender or class is outdated, which in my opinion means that intersectionality of a person’s identity has been highlighted in Haraway’s essay

(Haraway 2004: 11–19). Haraway's cyborg follows the ideals of a genderless, race-less civilisation, connected to machines and technology, collective and peaceful.

Haraway's intervention is based on her criticism of different strands of feminist theory of the 1980s. As mentioned before, Haraway argues that there is no universal basis for a collective female identity (Haraway 2004: 12). Instead, she combines socialist feminism and ecofeminism to develop her ideas of the cyborg and ontology. For Haraway, nothing really separates human from animal or machine from human anymore because of changes in thinking and advances in medicine (Haraway 2004: 10). Perhaps this is why we need the category of cyborg to signify the posthuman 'human'.

Haraway claims that we all know what it means to have a "historically constituted body" (*Ibid.* 16). Although Haraway does not explain it much further, it can be helpful to consider for example Judith Butler's work (1988) in which they claim that the gender and the body that a person has is "read" by others and by the people themselves differently depending on the historical context that the body is in. Later, Haraway sketches another epistemology, based on dichotomies that signify the transformation from old to new that she names "informatics of domination" (Haraway 2004: 20–21). For example, she positions organism (the old) against biotic components (the new) as well as sex against genetic engineering, and mind against artificial intelligence. Soon, the old will be replaced by the new in the light of technological changes. Although Haraway seems to build a new sort of an organisation that works on binary oppositions, she still criticises binary oppositions by caricaturing the structures of socialist and radical feminism, mentioning that there was no room for race or other identity politics in these taxonomies (*Ibid.* 19–20). This organisation brings attention to how posthumanism and Haraway's cyborg has stopped separating the mind and the body and instead focuses on a new sort of intelligence. Haraway also uses the dualisms as a way to show how the transition from old hierarchical dominations within industrial capitalism to a

new “informatics of domination” could go. The “informatics of domination” is Haraway’s epistemology, which she uses to show that as with the old epistemologies, we must question and analyse the new dichotomies and epistemologies that are created (Haraway 2004: 19–22)

Others have also discussed Haraway’s cyborg and found her radical ideas valuable in relation to other epistemologies. Halberstam (1991: 440) uses the Apple computer symbol (a bitten apple), recalling the apple of Eden, to suggest that a new creation myth is realised in the female cyborg who will destroy the binary oppositions that are used to link together women and nature and it will also question the boundaries of human, animal and machine at the site of the female body, where those boundaries are the most vulnerable. He discusses Haraway’s cyborg as well, considering Haraway’s work a radical departure from the postmodern feminist discourse which “merges radical feminism with a postmodern articulation of history and a politically necessary analysis of science and technology” and calls for a rethinking of feminism in the context of technology (Halberstam 1991: 447). Furthermore, he claims that in Haraway’s cyborg, the shape of postmodern feminism is realised. Halberstam highlights that Haraway’s cyborg finds delight in confusing the different boundaries (*Ibid.*: 448). Halberstam concludes that Haraway and her cyborg consider femininity as a coded masquerade and not a given (Halberstam 1991: 448–451).

Starting from 1985, the thought of artificial intelligence and biotic components has leaked into posthuman theories and the discussion of what differences there are between humans (especially women) and cyborgs. This has allowed scholars to rethink human intelligence and human thought (Clarke 2020: 95), especially in the context of heading away from anthropocentric humanism. However, much posthumanist and transhumanist thought still centres around the question of the (biological) human that is either a hybrid, a cyborg or no longer necessary. Regardless of whether the posthuman and transhuman is a hybrid or

cyborg, it remains embodied. Thus, post- and transhumanism both have dedicated considerable attention to the theorization of the body.

1.3 Posthuman/Transhuman Body

The notion of cyborgism appears in both posthuman and transhuman discourses, sometimes with slightly different ideas of what a cyborg body would look like and entail. This thesis focuses on the transhuman body and thus this subchapter will discuss different forms of transhuman and posthuman body, based on Katherine N. Hayles' (1999: xiv) claim that we have already become posthuman. Clarke (2020: 93) highlights that for Hayles, posthuman can be seamlessly integrated with intelligent machines and Hayles' thoughts about merging the human body with artificial intelligence or computational information leads from the posthuman body to the transhuman body (*Ibid.*).

The body, both as a problem and possibility, in posthuman discourse can be seen as a way to remap identity that forms from and onto the body. The body can become a problem when there is a need to change it or when it is lacking in any ways. Discussions can arise about what an average body can do and what a body could do if enhancements are used. For example, we can ask whether a body that has gotten laser eye surgery to correct vision is posthuman if there are bodies that can see perfectly without any surgical interference, as opposed to, say a body that has an endoskeleton or exoskeleton enhancement which allows it to jump on top of buildings. Even the World Transhumanist Association (abbreviated as WTA, quoted in Thweatt-Bates 2016: 41–42) defines that posthumans will be beings whose capabilities extend those of regular humans.

Although transhumanism does not necessarily advocate for the changes of the body, the notions of *cyborgism* and body enhancement come up in both posthumanist and transhumanist thought. According to Clarke (2020: 92), the cyborg is posthuman as it

undermines the Cartesian separation of the mind and body. In this thesis, the cyborg will be counted as one type of transhuman body as the thesis is more concerned with transhumanism. While transhumanism strives for a longer, healthier life, and superior mental powers, it is not possible to achieve these without, at least currently, dealing with the issue of the body. Geraci (2012: 581–582) exemplifies these claims with prescription drugs, which change the body's behaviour to boost its ability to function. He also argues that the smartphones and computers we use to “supplement” our brains' functions could one day lead to installing computers straight to our brains. This installation of technology to the body or the mind is a step in the direction of uploading a mind to some kind of a system, which could lead to the human body becoming obsolete. This sort of a change is, however, not the only one. Rizzuto and Fost (2012), for example, on the example of neuropharmaceuticals, ask if using such enhancers will give some people an advantage over others and if everyone should be given the option to take these performance-enhancing medicines (Rizzuto and Fost 2012: 571–574). However, they also claim that even good nutrition can be considered as an enhancer albeit not the type that many transhumanists focus on.

The first creatures that may come to mind when it comes to posthuman or transhuman bodies are usually cyborgs, androids or heavily modified bodies that blur the line between human and machine. Yet this blurring is not necessarily viewed with excitement as, for example, in science fiction writing the narrative of the cyborg often involves cyborgs going haywire as the machine parts or technologies are too much for the brain to bear or too easy to hack by malevolent others (MacCormack 2009: 118–119).

The ideas of theorists such as Braidotti who talk about *zoe* and *bios*, which replace our anthropocentric notion of the human have primarily been discussed within academic circles. However, the ideas from Haraway (Haraway's cyborg at least) and Hayles have gotten more attention within the general public perhaps because the cyborg figure is easier to play with.

However, mainstream society has taken a cautious stance regarding the increasing possibility of a transhumanist future. Although the possibilities are promising, the warning signs are always there about not straying too far from the human parts of embodiment. Too little cyborgification and one might be left behind; too many changes to the body and it becomes too much of a burden for the mind or the body. The technoutopism can eventually lead to technopessimism.

In real life, however, not all changes are visible to the naked eye. Perhaps one of the most invisible small steps taken towards being transhuman relates to how much technology is used daily by our bodies, especially with the help of machines. Nowadays, as was said by Hayles already, we have become cyborgs and this can include changes to the human body. However, no interventions are required as according to cognitive science an unaltered human can also count as posthuman (Hayles 1999: 4). For example, this can mean humans who use artificial intelligence helpers (*i.a* Alexa, Google Home, different robot vacuums) but have not changed their bodies. The transhumanity or posthumanity of these people then comes from slowly starting to integrate non-human entities into their lives, which, over time, changes the way that people's bodies [have to] work. Hayles (*Ibid.*: 6) furthermore highlights that people become posthuman when they think they *are* posthuman.

Changes to the body can start in a way that is invisible or barely noticeable. One such example is *biohacking*, making changes to the body in small increments which is popular in fitness circles as athletes change their eating and training habits to get better results, but biohacking can also include performance-enhancing drugs. In the art world, some artists use implants in performances¹ or to make art but biohacking has been gaining popularity more broadly, too (Samuel 2019). The easiest and most common form of biohacking is taking vitamin supplements, drinking coffee or using prescription medicine. For those able to carry

¹ See, for example, the works of Moon Ribas, of which *Waiting for Earthquakes* is the most well know. Ribas has implants in her elbows, which receive signals when an earthquake happens. The intensity and length of the vibration signals are determined by those of the earthquakes. <https://www.cyborgarts.com/moon-ribas>

children, another common biohack is taking different types of contraceptives that change the hormonal balance in the body and alter some of its functions. Biohacking can also take on a slightly more radical form in people who experiment with technology and their bodies, *e.g.*, by implanting sensors into their bodies. Chips put under the skin or small magnets implanted into fingertips to allow people to feel magnetic fields are an example of a type of biohacking that involves relatively small enchantments to the body almost invisible to the naked eye.

However, more extreme biohacks separate regular human beings from fully technological cyborgs. For example, Neil Harbisson, a British cyborg artist and cyborg activist, has an antenna implanted and osseointegrated into his head and it has become a part of his body – the antenna helps Harbisson to convert colours into audible vibrations (Stix 2016). As Harbisson is completely colour blind the antenna allows him to sense colours that he otherwise would not be able to differentiate. In Harbisson's case, technology is used to bridge the gap between something that his body cannot do and what an average healthy body can do. His antenna, furthermore, allows him to do something that an average body would not be able to do – he now can *hear* colour. Harbisson is also the first person to be recognised as a cyborg by a government, having gotten a passport in the United Kingdom that says he is a cyborg (Stix 2016).

It is possible to consider bodies like Harbisson's as machine-human hybrids especially as the antenna stands out as slightly grotesque, something that Sheenan (2015: 245) has highlighted in his discussion, to signify hybridity, and not-human. Furthermore, the body was previously lacking something that has been fixed through technology. As Rossini (2017: 159, 162) has described, posthuman subjectivity includes prosthetics and the hybrid body highlights these compounds as a conjunction between the flesh and the machine as stitching parts together creates one whole while the scarring leaves the unity between human and nonhuman parts visible. Rossini (*Ibid.*) describes these hybrid bodies as dependent on self-

exteriorization, but also open for outsiders, and while these different parts make up a unity, the scars highlight their compound nature. These compounds can also appear within the identity, contributing to the patchwork of identity.

However, other people have undergone modifications to their body or have inserted implants, that is, machines or technology, inside of themselves. In the last few years, planting little chips into people's hands has become more widely available, and these transplants function as payment cards or keys to unlock doors with chip readers. Additionally, cardiac pacemakers have been transplanted into people since the 1960s and are also widely used albeit not seen as transhuman enhancements.

Furthermore, entire body parts can be replaced, most commonly limbs. According to Hayles (1999: 2), pathways that connect prosthetic extensions to the body are central to the construction of a cyborg. These pathways (be they wires or sockets) help information travel between the prosthetic extensions and the flesh body. However, this also assumes that information is a sort of an entity that can travel between "carbon-based organic components and silicon-based electronic components" (Hayles 1999: 2) to make up one entity that could be called the transhuman or the cyborg. Harbisson could fit this definition of a cyborg well; the antenna he has functions as a technological prosthetic that allows information to travel to the flesh body, which then analyses the information. Even a regular grandmother with a pacemaker or a person with a prosthetic arm that would allow a person to grab things could be considered a cyborg.

In posthuman studies, hybrid forms can include modified and/or surgically altered bodies (MacCormack 2009: 118–119). Such bodies can appear in transhuman studies as well. Cyborgs (in this case not in Haraway's sense) are combinations of flesh and technology created through integrating machinery with the flesh or by creating a new body from both machine and flesh parts. Cyborgs, hybrids of multiple parts relate to the world differently

than humans specifically because their flesh parts interact with the world in one way and the machine parts another way. Cyborg bodies are posthuman and transhuman human-machine hybrids (MacCormack 2009: 111) or android bodies and prosthetics (Sheenan 2015: 245) that extend what it means to be human. Although Haraway (2004: 7–9) relates the cyborgs to women, it is possible to also interpret cyborgs as their own separate identities, who have distinctly different ways of embodiment and lived experiences.

When discussing the posthuman body, Sheenan (2015: 245) claims that a lot of posthuman theorising is based on the technoscientific discussion that revolves around the cybernetic, android body as a separate entity or genetically engineered and cloned human bodies. Such bodies would be no longer hybrid but something truly post-human or trans-human and in this thesis android bodies will be regarded as transhuman. According to Hayles (1999: 4), to construct the posthuman the subject need not be a literal cyborg; new models of subjectivity can still appear, regardless of interventions to the body. Machines do not have subjectivity but human flesh, while living, does; this leads to the questions if such a hybrid could be a subject and if a cyborg or a hybrid would have a “self”. Through the body of a cyborg, the divide between inorganic machine and organic flesh has been made blurry and oftentimes obsolete. This, then, leaves us to question if such a combination could be seen as an effort to extend life or an error that will lead to the destruction of the human(ity).

In other cases, the transhuman body can be monstrous or grotesque, analogous to the techno body. Such a body bears signs of mutations and disfiguration, which Sheenan (2015: 245–246) describes as associated with viruses, plague or other bio-forms – something to be wary or scared of. This leads to further questions on how much a body must be disfigured, grotesque or altered to become a cyborg and if a monstrous body will count as its own thing entirely. However, as been described and discussed previously, such disfigurations are not fully necessary. The best known monstrous posthuman body belongs to Mary Shelley’s

Frankenstein's creature, who was stitched together from different parts of corpses, making him disfigured and grotesque. The body of the creature is also a reanimated postmortem body, something that is not widely discussed in posthumanism or transhumanism unless we count the discussion of reanimating parts of the body or the whole body, which we see in real life when discussing organ transplants, most of which include harvesting organs from a recently deceased person and reanimating them into the flesh of a living person.

Perhaps the most post-human body is the body of a clone, a completely *post* human subject, being created after the image of the body but also being detached from the body itself as a separate entity. Sheenan (2015: 253) asks whether, if the clone is merely a simulation of the human, it can have its own identity and a soul. The other possibility would be that the clone has the identity of whoever it was cloned from. Although Sheenan uses the clone in a posthumanist context, the question of the soul does not stop with posthumanist thought; it can be argued that transhumanism revolves around the idea of the human soul or human mind as the central feature of humanity. However, in the context of the body, it is also important to note what happens to the soul and if it would even be possible to detach it from the flesh (or mechanical) body. Certainly, issues that arose with discussing uploading the mind into the computer are present here as well, specifically the ownership and rights issues.

Cyborg or not, the way that the body is seen and used by (post- and trans-)humans differs as well. For Hayles (1999: 5), human-machine combinations will be inevitable, however, she does not think they should become something played with carelessly: “/--/ my nightmare is a culture inhabited by posthumans who regard their bodies as fashion accessories/--/” (Hayles 1999: 5). Furthermore, she dreams of a posthuman that

embraces the possibilities of information technologies without being seduced by fantasies of unlimited power and disembodied immortality, that recognizes and celebrates finitude as a condition of human being, and that understands human life is embedded in a material world of great complexity (Hayles 1999: 5).

People might understand that without any prosthetics or other enhancements it will be impossible for their bodies to do something and so therefore they may undertake some of these enhancements, often without putting a lot of thought into it. In opposition to that, in utopian dreams, post- or transhumans would use technology while recognising the limitations of the flesh, finding release and relief in it while also looking towards the material world through perhaps what is now known as new materialism. How this transhuman body is therefore used and how a person embodies their body is entirely up to the “user/wielder” of the body. Among other things, this body is gendered, necessitating the discussion of gendered embodiment also within the discussion of transhumanism.

1.4 Posthuman and Transhuman Embodiment, Body and Gender

Within the context of some theories of the posthuman, one way to explain embodiment is through the representation of thought and information, a pattern rather than presence (Hayles 1999: 5, 25) which helps to see embodiment as repeated acts a body does. In posthumanism and transhumanism, the physical body is seen as the basis upon which the rest of the subject or personhood is written. This physical body then, in posthumanism and transhumanism, can be adjusted and changed, the patterns of embodiment can be changed over time but embodiment itself cannot be abolished.

Because of the inevitable gendering of the body, the issue of gender becomes central in posthumanism and transhumanism as well. According to de Beauvoir and Merleau-Ponty, as synthesised by Judith Butler, the body is a historical and social construct rather than “a natural species” or natural fact (quoted in Butler 1988: 520). Different gender theorists like Judith Butler and Donna Haraway emphasise the historical and cultural constitution of bodies. Butler’s (1988: 523) main claim is that gender is instituted through the stylisation of the body and the body is only known through its gendered appearance and, therefore, the

body becomes its gender through everyday acts that are renewed and revised in the process of performativity. Susan Stryker (2017: 31) uses Pierre Bourdieu's term *habitus*, which includes socially ingrained habits, skills and perceptions of the world but also smaller ways a person holds their body such as posture and accent. Habitus is something that a person learns by continuously imitating other people around them (Bourdieu 1977). Habitus covers patterns of being: patterns of having and using a body to convey some sort of a presence. Stryker adds a slightly different pattern-making to explain how people express their gender by stylising the body, something that Butler (1998, 2011) has also mentioned. For Stryker, stylisation can include different ways of walking and posture, but also what is worn on the body and how (clothes, makeup *etc*), patterns of speech and words used.

For transgender people, as Stryker (2017: 31) shows, habitus can also include hormone replacement therapy and gender confirmation surgeries that change what a body is able to do. For example, hormone replacement therapy during which a person takes testosterone changes their body so that their voice deepens, their body grows more and thicker body hair while the hair on the head might thin considerably. Almost the opposite happens when a person is taking oestrogen in hormone replacement therapy – body hair will grow thinner and appear in fewer places, but the voice will not change considerably. This resembles posthuman embodiment and, thus, it is possible to read a transgender body as one type of post- or transhuman body. However, one must be careful here to not undermine the experiences of transgender people and how they relate to their bodies. Some transgender people do not see their bodies as posthuman or transhuman bodies, like their bodies how they are or wish to change their bodies without enhancing the way the body works in such ways that transhumanism envisions.

Lucas Crawford (cited in Halberstam 2019: 24) considers embodiment a series of “stopovers” and the body is not just a “home” or a “dwelling” but instead an “archive”;

cataloguing different types of embodiment over time. Thus, taking hormones or changing a part of the body by changing the stylisation in minute ways can be “stopovers” that contribute to the wider meaning of what sort of an embodiment is developed in and onto the body. When Butler talks about performativity and the social construction of gender, Halberstam (2019: 29) adds that in addition, a body will also have new “chemical scripts” stored in them, which allow for the body to be chemically altered – made fertile or infertile, for example. Embodiment is produced as a “portal for the mixing of hormones, pain pills, antidepressants, mood elevators, pain suppressants, libido enhancers, blood thinners, sleep aids, diet aids, disease barriers, and anti-aging supplements” (*Ibid.*) This sort of an approach to embodiment highlights the need or want of humans to “biohack” their bodies so that they would conform better to what an individual wishes for the body to be.

When discussing gender and gendered body, MacCormack (2009: 123) hints that people who are neither men nor women nor a combination of masculine and feminine traits are themselves a sort of hybrid, like cyborgs. Through queering posthumanism, it seems that MacCormack (2009) tries to solve the problem of rigid gender binaries, which would allow people to embody their body but not necessarily assign a fixed gender category to it.

Perhaps nowadays we can talk about *virtual embodiment* – embodiment through computers and smart devices and that also could include artificial intelligence. Hayles (1999: 4) argues that the erasure of embodiment is common to the cybernetic posthuman. This, in her opinion, means that the subject is identified as the mind that possesses a body but is not represented as being the body. Considering artificial intelligence and information pattern making, it is not surprising to see how the subject can become identified as the mind and not the body. With technological advancements and the upload scenario starting to become more of a reality, virtual embodiment plays an increasingly bigger role.

Interestingly, Shelley's *Frankenstein* has also been linked to transgender people. Susan Stryker discusses the similarities between the trans body and Shelley's Frankenstein's creature in her 1994 essay *My Words to Victor Frankenstein Above the Village of Chamounix: Performing Transgender Rage*. She is not the first to do so (an earlier example is radical feminist philosopher Mary Daly's chapter "Boundary Violation and the Frankenstein Phenomenon"²) but the first to relate her experiences to those of the creature. In the essay, Stryker compares the rage that transgender people feel when they are counted as the Other or excluded from different spaces to the rage felt by Frankenstein's creature. Stryker says that she, too, is "often perceived as less than fully human due to the means of my embodiment" (Stryker 1994: 238), highlighting that this sort of attribution was common for most transsexuality. With her essay, Stryker reclaims the creature as an empowering figure for transgender people.

Judith Butler has also brought attention to Frankenstein's creature's gender, claiming that the creature's gender does not fit properly under "man" or "woman"; therefore, liminal space for gender is found in Frankenstein's creature (or the monster) as well as the "the disavowed dimensions of manhood" and "the unspeakable limits of femininity" (Butler 2014: 47–48). The creature might have both female and male traits because it has been detached from society and therefore not made to conform to just one gender or one way of being. The creature is made a hybrid because its embodiment differs much from what is seen as "usual" and how its gender is constructed on its body.

This discussion shows that feminist thinkers have been long fascinated not just by the cyborg as a human-machine organism but also in Frankenstein's creature as a parallel to transgender and nonbinary embodiment that is often considered monstrous by society at

² Daly, Mary. 1978. *Gyn/Ecology: The Metaethics of Radical Feminism*. Boston: Beacon.

large. This confirms the usefulness of analysing transhuman bodies in the feminist rewriting of Shelley's novel in the next chapter of the thesis.

1.5 Discussion

Of the theories described above, this thesis will use those on the transhuman body, although it will also discuss the decentring of human(ity) as described by Rosi Braidotti (2017: 20) and Patricia MacCormack (2009: 112), however, instead of human and non-human animals being seen equal, human and technology are compared. Combining what Sheenan (2015: 245–246), Åsberg and Braidotti (2018: 7), Hayles (1999: 5) and Rizzuto and Fost (2012: 570) have argued, the posthuman body will be the sort of body that has been enhanced with the help of cybernetics or prosthetics or intelligent machines. When it comes to the transhuman body, Åsberg and Braidotti (2018: 7), Geraci (2012: 579) and Rizzuto and Fost (2012: 570) describe the transhuman body as a body that wishes to overcome the limitations of the body with the help of technology, science or medicine. Although Sheenan, Åsberg and Braidotti and Hayles talk about the posthuman body, the above points about the integration with machinery and technology also apply to the transhuman body.

When many substantial replacements to the flesh have been done, it is possible to talk about cyborgs. Originally popularised in the feminist and posthumanist circles by Donna Haraway in 1985, the cyborg is almost a mythological being – there in fiction and social reality as a hybrid yet not necessarily visible to the naked eye. Other forms of hybrid bodies are seen in transhumanist thought, most of them hybrids of human and technology, in which the technology has been integrated into the human flesh in different capacities – people with prosthetics, technological chips, cyborgs and androids all have different levels of transhuman bodies. In the following discussion and analysis, the cyborg and the hybridity will be looked at as examples of the transhuman. The transhuman can also be a body that has been enhanced

without necessarily becoming a hybrid body, which can include taking different medications, eating better food or sleeping and drinking coffee to maximise the brain's capability to be productive or work effectively. In addition to that, artificial intelligence is under observation concerning (sex)robots but also in relation to how the humans of today see these "secondary" life forms and how optimistic or pessimistic they are about the possibility of artificial intelligence easing the daily workload of the average person.

2. THE TRANSHUMAN IN *FRANKISSSTEIN: A LOVE STORY* (2018)

2.1 Methodology

In order to analyse the representation of transhuman bodies, as well as the posthumanist and transhumanist discourses in Jeanette Winterson's *Frankissstein: A Love Story* (2018) I will use the method of reading with the grain, following the example of Bewes (2010), with special attention to the representation of the transhuman (trans)body.

Reading with the grain means reading the text with the aim of understanding the text as the author has wanted the text to be understood. The word choice and themes are explored but there is less outright criticism and search for the hidden or suppressed features of the text that was central to different critical schools reading against the grain. According to Bewes (2010: 18), reading with the grain is reading that "suspends judgment; historicizes the text and the moment of reading the text simultaneously; that refuses to frame the text as existing independently of our reading of it; that engages with the radical instability, potential, and appropriability of the text, rather than its identity". From Bewes' definition, I will take the part where reading with the grain suspends judgement and engages with the potential of the text. In addition to this, I will focus on the thematic choices and choices in the form of the text that the author has made to better analyse the novel.

At first, the text will be read carefully to find passages dedicated to and transhumanism or embodiment and then the sections will be discussed in the light of and transhumanist theories described in the previous chapter. The chosen passages either describe something to do with the body, have clear allusions to posthumanism and transhumanism or discuss the topics of embodiment, cyborgs and gender. Therefore, the chosen passages come from different parts of the book, mostly focusing on the extracts that concern the main

character Ry Shelley and their transhumanist friend-partner Victor Stein, and his task of (re)building a body. In some cases, parallels to Mary Shelley's *Frankenstein* will be given.

The analysis will be divided into the following thematic subsections: (re)creating life and stopping death; body parts as human body parts and dismemberment; artificial intelligence; sexbots and technopessimism; the trans body as a transhuman body; and singularity as a new form of a transhuman human.

2.2 Jeanette Winterson's *Frankissstein: A Love Story* (2018)

Jeanette Winterson's *Frankissstein: A Love Story* (2018) consists of three intertwined narratives. The first narrative follows Mary Shelley, the author of *Frankenstein: A Modern Prometheus* (1818) from when she started to write her novel in 1816, to her and Percy Shelley moving around in Europe and her becoming pregnant and losing three of the four children she birthed. Her body changes as she goes through her pregnancies and she often ponders upon why life is as it is in the early 19th century, especially for women – giving birth to children only to experience the grief of having to bury a child. Mary Shelley's storyline in the novel ends with her meeting Ada Lovelace, the daughter of Shelley's friend Lord Byron and one of the first computer programmers, at a gathering that Lovelace is holding. At the end of the gathering, she meets a man to whom she refers as Victor, asking the rhetorical question of beginning again, symbolically, as Shelley herself has had to begin anew with every pregnancy, hoping that this time the life will not fade quickly.

The second narrative follows Ry Shelly, a transgender doctor in today's UK, who at the beginning of the novel is to interview Ron Lord, the creator of new-generation sexbots. They also hear Victor Stein give a talk about the future of humanity and artificial intelligence. Stein, a transhumanist and scientist, is the character through whom most of the ideas about

the future of humanity are conveyed. Ry and Victor have met before and have become lovers, but in addition to this, Ry brings Victor amputated and discarded limbs for his experiments.

The two discuss Ry's body as an example of the body of the future. Victor mentions body enhancement, uploading the mind to computers but also rebuilding the body piece by piece and having replacement parts readily available. Later in the novel, Victor shows Ry his laboratory and his experiments with the body parts that Ry has stolen, as well as two robot surgeons who are operating on animal brains and mapping them. After Ron Lord becomes a partner for the business that Victor works for, Lord and his assistant Claire are also shown the laboratory. A journalist, Polly D, sneaks into the underground building as well and all of them are locked into the underground bunker as Victor concludes his final experiment. Earlier, Victor has had Ry steal the head of his old mentor I. J. Good in hopes of uploading Good's brain into the cloud, which he hopes will lead to a new stage for humanity. It is never revealed if the experiment succeeded, as Victor disappears and, in the following blackout, so does all information about him.

The third narrative that is entwined with the other two takes place in the Bedlam Institution, a place where mentally unstable people were held in 1818, and is told by the man who runs the institution. Captain Walton, a narrator from Shelley's *Frankenstein*, brings a man named Victor Frankenstein to Bedlam and although Frankenstein is not "as mad" as other patients, he is kept at Bedlam because he claims he has created life. He meets Mary Shelley, asking her why she has created him and days or weeks later, in a flash of light, disappears without a trace just like Victor Stein.

The narratives intersect and appear in the novel after one another, starting from Mary Shelley and alternating between her and Ry's narratives, with Bedlam's narrative appearing about halfway through the book. Although at first glance it can be said that the narratives appear in an almost random order, the intersection happens through characters – for example,

Ry Shelly's name is clearly a wordplay on Mary Shelley's name. Both Ry and Mary discuss what life is like for them in relation to their body and embodiment and how it could be if things were different. Victor Stein is the contemporary Victor Frankenstein, and they both are respectable doctors outside but hold unorthodox utopian ideas about life and reviving dead bodies. Victor (Franken)Stein seems to move from Shelley's book to contemporary UK and USA, and Bedlam in a second narrative, to then meeting with Mary Shelley, his creator, back in the 1850s. The other characters that create a link to the original Frankenstein are Ron Lord, a revised version of Lord Byron, his assistant Claire who evokes Shelley's half-sister Claire Clairmont who was having an affair with Byron and the journalist Polly D. is a version of Dr John Polidori. All of these real-life persons were together during a vacation when *Frankenstein* was written. The discussion of transhumanism is mostly linked to Ry, Victor Stein and Ron Lord, so they get the most attention in the following discussion.

2.3 Analysis of Jeanette Winterson's *Frankissstein: A Love Story* (2018)

The following discussion is organised thematically by topics that deal with the necessity of the body or ways in which overcoming the body would be possible, for example, by replacing flesh with machinery if the flesh parts are insufficient or wishing for the body to become obsolete. There are six subsections of this analysis and the seventh discussion section discusses the findings. The first subsection discusses (re)creating life and stopping death, the second subsection is about reanimating body parts, the third subsection deals with the transhuman body as the brain, the fourth subsection examines artificial intelligence and technopessimism that comes with integrating artificial intelligence, the fifth subsection considers sex robots as a new sort of life forms, and the sixth subsection deliberates if the trans body could be a form of the transhuman body.

2.3.1 (Re)creating Life and Prolonging It

One of the central topics of the novel is the creation of life and who is allowed to create life, not a topic that often comes up in transhuman thought. Mary Shelley ponders upon life as she sits in the damp house near Lake Geneva after she, Percy Shelley, Lord Byron, Byron's physician Polidori and Mary's stepsister Claire have discussed the creation of life and the differences between men and women, male and female fetuses and babies. Shelley then dreams of a man who has created life: "I saw the pale student of unhallowed arts kneeling beside the thing he had put together. I saw the hideous phantom of a man /--/ show signs of life, and stir with an uneasy, half-vital motion" (Winterson 2020: 21). This becomes the basis on which Winterson's Mary Shelley creates her Dr Frankenstein, a scientist who aims to create life from death, an idea that was controversial and even heretical in the 19th century and is controversial today as well. In the novel, in Bedlam Captain Walton explains that Victor Frankenstein "**believes** [bold mine] that he has created life /--/ A created **being** without scruple or stop" (Winterson 2020: 183). The word choice, especially 'believe that he has created life' and 'being' instead of '(hu)man' highlights how according to the novel, in the 1850s, it was considered impossible for a man to create life equal to human; only God could create life from nothing. Frankenstein's failure to adhere to the moral norms of the day is stressed. Victor Frankenstein has usurped the power usually attributed to God to create something that could be considered post-human. In the original *Frankenstein* (1818), combining body parts and then bringing the result to life is perhaps the first example of a posthuman body in literature.

The posthumans and transhumans of today tend to be enhanced by prosthetics or transplants, the latter of which can be less visible to the outsider. It is possible to see

Frankenstein's creature as a transplant and prosthetics experiment, as his body is entirely constructed from body parts chosen for their special capacities. Winterson takes the idea of prosthetics even further and questions their necessity. Why would there be a need for prosthetics that have been specifically made to lengthen the lifespan if you could just return to life once you die? The post-mortem body of Frankenstein's creature shows that piecemeal reanimation is not necessarily effective. The novel, instead, talks about cryopreservation as a way to return life to the dead (Winterson 2020: 103–105) – specifically describing how a body will be submerged into ice-cold water, how blood circulation will be restored, and blood replaced with chemicals to keep the tissues from freezing. Finally, the body will be held in a special tank to keep the temperature low enough. Everything about the description that Ry gives is clinical and a neutral position is held: “The process of filling you with cryoprotectant takes about four hours. Two small holes will be drilled in your skull so that brain perfusion can be observed” (Winterson 2020: 103–105). The detachment of the scientist is not that different from that of Victor Frankenstein, but contemporary technology has given Victor Stein more reliable tools for playing with life and death.

Although the description of preserving a body is medical and clinically detached, it seems that Winterson is ironical about the possibility of cryopreservation. Through Ron Lord, we get the question “[W]hy all the fuss about the body? People are mostly old when they die, aren't they? /--/ So they come back as sick, old people?” (Winterson 2020: 224). Ry (*Ibid.*) offers that one day there might be medication that reverses the ageing process of the body or it may be possible to grow or build a new body if only the human brain is preserved, or perhaps, a body will not be required and necessary at all. Both sides presented are seemingly serious and the reader is left to pick who to believe and whose statement to be sceptical about. The mind is shown to be the crucial feature of a person, not their ageing and vulnerable body although Ry assures it would be warmed up and not gone.

In a similar vein, Victor says: “The answer may lie in reviving the brain at a very high temperature and very quickly” (Winterson 2020: 185). It would be the first step towards figuring out how to preserve and reheat organs for organ transplants or, to extend the lifespan of people. Victor, however, is not very interested in that (Winterson 2020: 186). He, instead, wants to bring back people from death or if this is impossible, to upload the brain. The wish to overcome sickness and ageing of the body is a noticeable trait in transhumanist thought, as well as making the body unnecessary, something that Victor clearly wishes. When we focus on how Victor prioritises some parts of the body over others, we can see that there are clear distinctions he makes – the brain is seen as the most important part of the body and the human.

2.3.2. Reanimating Body Parts That Matter

Although we usually talk about the body as one whole unit, in transhumanist thought it is often possible to focus on one body part especially because it is lacking something. The body part is either too weak (limbs or the back, for example), does not function fully (for example, the brain) or its functions have been hindered by illnesses or trauma (for example, the reduced movement of joints). Through medicine or technology, it becomes possible to “fix” the lacking body part, be it through simple enhancing by taking vitamins, using medicine, or fully replacing the flesh with different types of machinery.

In the novel, this sort of transhumanist wish to “fix” what is not working to its fullest is mostly represented through the voice of Victor Stein whose area of expertise is advanced prosthetics. He supposes that soon enough, prosthetic limbs may be more advanced than they are right now: “Transhuman enhancement may begin with computer controlled prosthetic limbs” (Winterson 2020: 88). Here, Stein already admits that transhuman enhancement is on

the horizon. At first, the enhancements will not be something scary looking, just prosthetic limbs controlled by a computer: “The new leg can be programmed, via a smart implant, to walk like the existing leg” (Winterson 2020: 149). From this, it is possible to assume that transhumanism does not wish to always visibly show its enhancements. This could create hybridity in which the flesh invisibly meshes with the mechanical. Advanced prosthetic limbs that integrate biomechanics with microprocessors are already in the works in real life as well: Hugh Herr from MIT showcased bionic legs that allow people to climb and dance in 2014 at a TED talk (Bast, 2014). Therefore, the prosthetics that Victor discusses in the novel are not utopic dreams but instead a reflection and intensification of our present situation.

Technological “fixes” becoming more widely available might bring about a more pessimistic view – instead of prescribing physical therapy that might last years, doctors might suggest replacing the whole limb. As if that was not enough of an ethical concern, additionally, Stein discusses what even makes a body and which parts of the body are more representative of the whole human as other body parts. He and Ry discuss the implications that this might have even if, in Ry’s opinion, it is not possible to separate the body from the brain when discussing what a human is as in their opinion the brain and the body make up the human.

“Really, Ry, when you consider the human as a collection of limbs and organs, then what is human? As long as your head is on, pretty much everything else can go, can’t it? And yet you dislike the idea of intelligence not bound to a body” (Winterson 2020: 148). This sort of dichotomy that Stein makes highlights how, in transhumanism, there is still a divide between the body and the mind, with the mind (or the brain) having bigger importance. Ry, however, disagrees: “We are our bodies, I said” (*Ibid.*). Their opinion mirrors a more feminist (and posthuman) approach, according to which it is impossible to say that the brain, as the place for the mind, is not connected to the body as the brain receives information from the

surroundings through the body. Within posthumanism, all parts of the body seem to carry meaning and to be as important as others. For Victor, a transhumanist, there is a clear divide between which is the most important parts of the body. Hands, for example, are for him to play around with and to experiment with so that he could learn how to conduct electricity through them and how to add computer chips to help reanimate these hands.

Hands. Spatulate, conic, broad, hairy, plain, mottled. /--/ Moving. Some were still, twitching a single finger. Others stood raised and hesitant on all four fingers and thumb. One walked using its little finger and thumb, the mid-fingers upwards, curious and speculative, like antennae. Most moved quickly, senselessly, incessantly. /--/ Some of the hands you see there are hybrids in that way. (Winterson 2020: 170).

This is not very different from the behaviour of Mary Shelley's Victor Frankenstein who thinks more of the possibility of scientific discoveries than the ethics of his work. Just like Shelley, Winterson has the other characters come to the conclusion that this sort of testing on human body parts is not ethically and morally acceptable. Although Victor calls these hands hybrids – they are indeed machine and flesh hybrids – they are not their own creatures per se and therefore they cannot be considered to be a new sort of a transhuman body because there is no “brain” leading the hands but small computer chips release currents into the hands. Even if the hands could be considered hybrids, they are simply one step in the way of learning how to use microchips to advance the movement of limbs or how to map these movements onto mechanical limbs so that it would be possible to produce bionic prosthetics faster and more efficiently.

However, one piece of the body that cannot be replaced in any shape or form yet is the brain. The brain, then, as the centre of the body is what is discussed later. “From my perspective, said Victor, the body can be understood as a life support system for the brain” (Winterson 2020: 184). The rest of the body, be it flesh or metal, acts as a customisable protective casing for the brain, which in Victor's opinion is the centre of the whole human experience.

Even if Victor Stein advocates for the removal of the brain from the body, either to later upload it into a computer or to craft it onto a synthetic body, he admits that without the body, the brain will have a hard time understanding the surroundings: “The brain is packaging /--/ One of the challenges of uploading a human is the shock they will experience at being out of a body. A body is what we know“ (Winterson 2020: 266). Here, posthuman sentiments that tie the embodiment with the body are mixed with transhuman sentiments. As the body is really what we know, questions arise within the novel about the flaws of the upload scenario and therefore enhancements, “fixing” what is broken or not working too well, are preferred. In the novel, the characters do not concern themselves with ethical questions such as those that Thweatt-Bates (2016: 54) asks about the ownership of the identity when more than one “copy” of the person exists as more emphasis is put on the issues of the brain being without a body and what happens to the embodiment then.

2.3.3. The Brain as a Transhuman Body

In the transhumanist context, it does not seem too utopian to think of the body as only flesh that hosts the brain, almost like a package. Seeing the brain as the main source of personhood is one of the transhumanist ideas. Transhumanist thinkers such as Moravec (1988: 117, through Geraci 2012: 582–583) and Hayles discuss how the brain is only patterns of electricity. In Winterson’s novel, Victor Stein ponders about this as well, while having two robots work on mapping a mouse’s brain. He wishes to upload a brain into a computer or the cloud, the first step towards what is called the Upload Scenario in transhumanist thought. First, however, he has to start by mapping an animal brain as the human brain is so much bigger and contains much more memory space.

The thought that the mind does not need for the body is ironically depicted in the novel through Ry's eyes – through popularising slogans and products that the slogans sell. They note that they can see that “[s]ome young guys are wearing T-shirts with the slogan ‘Give Up Meat’. /--/ [T]hey believe that soon enough the human mind /--/ will no longer be tied to a body /--/” (Winterson 2020: 35). Ry is sceptical of this, as can be seen in the reduction of the human body to meat in commercialised versions of transhumanism. For them, it can seem also a topic that is popularised and that the young men are not actually interested in fully giving up their meat bodies.

Victor, however, is quite adamant that such a change will be possible, even if not in the near future. Victor and Ry clash over this topic later with Ry supporting embodiment through the flesh (or flesh/machine hybrid) body even if it is different for everyone: “Transhuman means different things to different people; smart implants, genetic modification, prosthetic enhancement, even the chance to live forever as a brain emulation” (Winterson 2020: 104). Therefore, there is no need to take things as far as uploading the brain to be able to achieve a transhuman body – smart implants that help with daily tasks might be enough if the person so chooses. Additionally, it seems that Ry supports that enhancements on the body can be done gradually, as is suggested by Kurzweil (through Thweatt-Bates 2016: 54).

The different options of what happens to the body and how it will be enhanced are discussed in the novel as well. Victor proposes different ways how the body can be improved on or cast aside if the improvements are not good enough.

Well, in no particular order, /--/ options are as follows: humans will learn how to halt and reverse the ageing process; we will all live healthier and longer lives. We're still biology but we're better biology. Alongside that, we can enhance ourselves with smart implants to improve our physical and mental capacities. Alternatively, because biology is limited, we abolish death, at least for some people, by uploading our minds out of their biological beginnings. /--/ At the same time as all or any of those possibilities, we also create various kinds of artificial intelligence (Winterson 2020: 113–114).

Mirroring transhuman ideas of enhancement discussed earlier, there are different ways to prolong life mentioned in the novel, either through medicine (halting and reversing ageing) or technology (smart implants). However, Victor would like to heavily rely on technology as he sees it as a way forward – either humans will learn to upload their minds or they will create new forms of intelligence that will help people. Although he mentions artificial intelligence as one of the possible advancements, it seems that he sees artificial intelligence alongside the human and not replacing the human fully.

Moreover, Victor seems to prefer being uploaded into the computer as the next step in evolution (Winterson 2020: 110), but he does note that there are downsides to this idea: “One of the challenges of uploading a human is the shock they will experience at being out of a body. A body is what we know” (Winterson 2020: 266). Victor admits that there might be a problem when the human is just a floating consciousness and there is the question of where the consciousness would go as it cannot exist on its own or without some packaging. However, he proposes that it would be possible to just download a carbon body or a shell to host the consciousness, which can be a human body or a vegetable or another animal (Winterson 2020: 115, 266). Here, Victor mixes posthuman thought into his repertoire. However, as he also mentions that he would like to have wings, Victor (and Winterson) may be being slightly ironic in thinking that a human being would ever want to return to a body after being uploaded, much less to a plant or an animal body.

Even if discussed with irony, Victor and Ry bring up something important – how would a brain even know it has been taken out of the body and put online or into a new body?

[I]f we could revive a ‘dead’ brain, that would be fascinating – for the person who is returned, and for us. /--/ Personally, I would find it terrifying, I said. And that brain would not have a functioning body. /--/And that brain may not be aware of the fact, said Victor. We can simulate its environment. Don’t most people have body–mind disconnect? Most people do not recognise themselves in the mirror. /--/ The mind is often disconnected from its host (Winterson 2020: 187–188).

Victor’s answer to this is simulating the environment and he claims that most people already are disconnected from their body; therefore, a brain without a body would feel more

or less the same as it does with a body attached. Nevertheless, this is mostly still Victor's hypothesis as the novel does not present what a brain might feel once removed from the body and then reanimated. Reactions to such an idea are not enthusiastic in the novel; Ron Lord, for example, says that "I don't fancy being a disembodied body" (Winterson 2020: 224). The divide between body and mind has appeared in philosophy since humanism and this might be why Ron Lord cannot envision being a person without a body. A brain that has its environment stimulated is a grotesque hybrid of artificial body and flesh body merged through technology. Therefore the "body" that Victor offers up here can be counted as one form of the transhuman body.

2.3.4. Artificial Intelligence as a New "Life Form" and Technopessimism

Another sort of "body" that comes up in transhumanist thought is the absence of the body. Instead of humans, transhumanism can turn to robots and artificial intelligence that have been designed to aid humans when they are unable or unwilling to do things. In the novel, artificial intelligence and "little helpers" are brought up and different characters discuss the future of humans. The reactions of the characters to helpful robots differ drastically – Victor sees automated life as an inevitable future reality while also seeing robots as an alternate life form; Polly D, on the other hand, expresses conflicting feelings, understanding that the robots could help but also being very pessimistic about it.

Victor is clearly fascinated with life forms that are not human and how the life of humans might change:

Cars, trucks, buses, trains will drive themselves. Stores and supermarkets will use smart tracking for your purchases. Your home will use repair diagnostics. Your fridge will order its own food. Bots will take care of the housework and entertain your children (Winterson 2020: 91).

Victor sees robots as ways to ease some burdens from humans. As he relates artificially built mechanical "life forms" to humans, he suggests that perhaps they will also

build bad habits, which he is excited to discover or learn about. He, however, mentions that these habits “won’t be sugar or alcohol or drugs” (Winterson 2020: 264). This would make artificial intelligence forms both similar to humans as they have vices but also different because those vices will not be the same as humans have.

Other characters are not as happy about the continuous technologization that will lead to different forms of companions and they are rather sceptical about the approaches. Polly D discusses her apprehension quite openly with Ry: “I don’t trust the way AI is being sold to us. People aren’t in the conversation, let alone the decisions /--/ We think change is gradual, incremental, that we’ll get used to it, adapt. But this feels different” (Winterson 2020: 98). Her fears about what technological advancements may bring echo what is happening in real life as well – people today, like during industrialisation, become afraid of rapid changes and what they might mean for their privacy and personhood.

Ry, however, as sceptical as they may be about computerised consciousness and reheated brains, sees promise in these new “life forms” as companions: “Children will soon have mini-iPals to keep them company – bots with computer screens in their chests. Bots that will sing to the kids. Tell them a story. Play games. Mother’s little helper” (Winterson 2020: 99). People who have been “mother’s little helpers”, nannies, housekeepers or cleaners, can be replaced by robots and it should, at least ideally, make people’s lives easier and allow people to focus on what matters more. This is portrayed as a way of liberating women from underpaid care work. The new life forms will be integrated with people’s lives and this might lead to a sort of a hybrid flesh person-technological robot relationship which will change the way that people live as well. However, this commercial solution will also radically alter the notion of care, but this topic is not mentioned by any of the characters.

Such symbiosis is highlighted by Victor later in the book as well and he emphasises the need for humans to be above these helpers, which is a very transhumanist thought that repeats the anthropocentric worldview.

But [Turing's] view was that if an AI can fool us into thinking it's human during a conversation /--/ then we will have reached parallel life forms. /--/ Personally I would prefer to develop bots as a completely separate life form that remains sub-par to implant-modified humans. Our helpers and caretakers – not our equals (Winterson 2020: 150).

According to this quote, the parallel life forms that Ry and Victor have mentioned already exist, although they may not be counted as such yet. The most important function of these intelligent creatures will be helping people and not being equal to humans. In the novel, Victor uses the helpers to dissect a mouse brain, but they do not think on their own. Therefore, while discussed in the novel as a new transhuman life form and “body”, artificial intelligence does not feature in the novel but discussions surrounding the future of artificial intelligence highlight a certain pessimism towards technological advancements. There are, however, some robot bodies that get more attention than others as they resemble humans more.

2.3.5. Artificial Bodies – Sex Robots

In the novel, we also see different transhuman bodies that are more than hybrids or cyborg bodies. These bodies range from human bodies that have been altered (Ry, whose body will be discussed in the next subchapter but also Victor, who has, according to Ry, gotten Botox treatments for his ageing face) to robots with some artificial intelligence. The transhuman or posthuman body no longer is only made up of just biological flesh. Additionally, Winterson plays with the idea of artificial intelligence in the posthuman context, in which sexbots have been created in the United Kingdom mostly for the British male audience. Usually, artificial intelligence is seen as something grander. However,

Winterson simplifies the intelligence factor and highlights the artificial component. In her novel, artificial intelligence is used in sex robots, artificial women created by a man, and meant for men (male sexbots for women are mentioned but not realized; male sexbots for religious men as a measure against child sexual abuse is also brought up). Their inventor, Ron Lord, describes the whole building process to Ry Shelley:

Look at this /--/ [t]orso comes through first, swinging on the overhead wires, complete with two holes, user-ready, and F-cup moulded tits. /--/ Anyway, torso, torso, another torso/--/ See how they attach the arms? Lovely slim arms. Then the legs. /--/ Slightly longer than they would be if she was human. This is fantasy, not nature, so you can have what you want (Winterson 2020: 37).

Lord boasts about their quality and sexual appeal. Only the best parts are chosen to make up the sexbot so that they would be as pleasant for men to look at and use. This, again, recreates Victor Frankenstein's approach to the body, which means picking the best body parts, but here in a non-human form and for an explicitly commercial purpose. The sexbots are thus somewhat monstrous. The fact that the sexbots are creations of fantasy is also highlighted – even if the bots look almost like human women, they are different enough to be noticed as not human. The parts of women that men (stereotypically) like are exaggerated to make the sexbots more attractive and to sell more of the “product” (the opportunity to have sex whenever one wants); their arms are slim, breasts huge and legs longer than normal.

It is highlighted how these robots might look like women but are very different from flesh women. Ron describes the “girls” further to Ry:

My girls can seem lower-temperature than born and bred girls /--/ Very tight figure – little waist, double-G-cup – and I tell you what, her tits and her pussy are always warm. It's the battery plus the thermal layer. Battery life is up to three hours. I mean, men come in about four minutes, so this is generous (Winterson 2020: 43).

The bodies of these sexbots have been taken to the extreme with their hourglass figures and warmth that is unevenly spread over the body; all this to offer men a fantasy that they could not get in real life. The fantasy here is packaged into a product and the limiting temporal aspect of the fantasy is emphasised. Even if the sex bot's body is inviting, nice and warm to touch for three hours, after that the illusion of a beautiful woman disappears and the

robot has to be charged before it is once again warm to touch. Even if it can be admired or used again when the battery is low as well, the illusion is broken. With this, Winterson furthermore puts the sexbots in the realm of beautiful creatures that ultimately are not a new form of life and just appliance-like synthetic flesh with technology integrated into them.

However, what sets these sexbots (called XX-BOTs which could be a reference to them being x-rated (Winterson 2020: 38)) apart from robots is their ability to communicate with humans. The cheapest, “economy” model has “limited but adequate voice response – like meeting a girl abroad who doesn’t speak much English” (Winterson 2020: 41), but expensive models can communicate more; the Deluxe variant has the vocabulary of 200 words, and she will be a very attentive listener, letting her man prattle on about “football, politics or whatever. She waits till you’re finished /--/ and then she’ll say something interesting. /--/ Climate change. Brexit. Football. This model is a companion” (Winterson 2020: 46). Although 200 words is not a big vocabulary, considering that the main function of the robot lies in being quiet, beautiful and ready for sex, they are intelligent enough for what they were meant for. These robots even learn from what is being told to them and answer accordingly. For example, if the topic of the discussion is football, the doll might respond with: “I hadn’t thought about it like that. Do you know anything about Real Madrid?” (*Ibid.*). Winterson has a lot of fun caricaturing sexist visions of women who are reduced to their bodies and used for sex, with no attention to their speech or brains. Still, there are also robots who are family-friendly and can tell fairy tales or talk about animals, which makes them appropriate for everyone to be around (Winterson 2020: 45). This signifies that posthuman and transhuman companions can be integrated into society, perhaps even especially when these companions look like humans or some perversely “perfect” form of a human, specifically women as the robots mostly do carework and perform sexual services.

If the robots and AI mentioned previously created more technopessimistic ideas, according to Ron, the sexbots are a good addition to every man's life and make life easier as well; when you have a sexbot at home, you need not worry about a partner or their moods and you have access to unlimited sex, and the best thing is once you are done you can just put the bot away and it will not take any room up. This, too, stresses the sexist nature of many transhumanist fantasies that are very far from the feminist visions like Firestone's or Haraway's that imagined artificial bodies as an escape from reproduction and dangers related to it and as liberation for women.

2.3.6. The Trans Body as Transhuman Hybrid Body

Winterson's *Frankissstein: A Love Story* (2018) is partly narrated by a transgender narrator-protagonist Ry, which means that during their sections, we experience the events of the novel from Ry's perspective only. There are discussions of their body and gender both as presented in the narrated time as well as how their body and gender might become obsolete and unnecessary in the future if the brain could be scanned and consciousness uploaded online. Most of this discussion is between Ry and Victor in relation to the sexual relationship and the future of humanity. Ry does not think of themselves as a woman or a man, but as trans or a combination of female and male traits: "No, Ron. I am a hybrid. /--/ I'm trans. /--/ Transgender" (Winterson 2020: 83). The posthuman body and transhuman body are often hybrids, but usually a human-nonhuman hybrid; in Ry's case, their hybridity comes from their gender. However, as we learn soon enough, Ry's body is also almost hybrid, through taking testosterone and having undergone a double mastectomy.

Ry being not fully a man or fully a woman allows for the reader to relate them to Frankenstein's creature who, according to Butler (2014: 47–48) and Stryker (1994: 238) is a

figure that has been linked with transgender people. Stryker (1994: 238.) discusses how such links have always been negative, but she reclaims the image of the monster who is full of rage for being outcast by others. Just like with the creature being misunderstood, Ry is misunderstood by other characters who either wish to place them under the label of male or the label of female, both of which they accept and blend into their identity. Perhaps Ry is partly the reworking of Frankenstein's creature, going against the wishes of their creator and choosing to set out to pick their own path and to be what they want to be while no longer being just posthuman but also transhuman. Once they find a creator (for the original creature this is Frankenstein and for Ry it is Victor, both set out to recreate life), both the creature and Ry run after their respective 'Steins', asking for love and understanding.

Ry also asks Victor if this hybridity made them appealing to him: "You love the idea of me, I say. /--/ Because you're a hybrid? /--/ Yes. (We've had this conversation before.) /--/ You are also a human being. /--/ That is a stage on the way for you..." (Winterson 2020: 154). While hybridity made Ry attractive to Victor at first, it is also the promise of what may come next that is so appealing to him: as a transhumanist scientist who is almost obsessed with progress in the field of medicine and biotechnology, Victor sees progress in Ry from the body that a person has been given to the body that is the most optimal. Later in the book, it is clarified that his attraction is not only physical but also mental as it is related to Ry's body having been enhanced.

Ry's body can be considered a transhuman body especially when taking into account Rossini's claim that the scars on the body highlight how the body has been modified (Rossini (2017: 159): the scars of double mastectomy still show on Ry's skin. Only Victor Stein sees the scars willingly. He, however, exoticises Ry and their body and the medical means to change their body:

No other species can tinker with its own destiny. And you, Ry, gorgeous boy/girl, whatever you are, you had a sex change. You chose to intervene in your own evolution. You accelerated your portfolio of possibilities. That attracts me. How could it not? You are both exotic and real (Winterson 2020: 154).

Victor admits that Ry is exotic to him because they have taken a step closer to becoming transhuman or posthuman as they have taken charge of their own evolution instead of letting nature do its work. He does not see them as an individual who changed their body to fit their definition of their gender better; for him, Ry is not perfect, but stepping towards the path Victor wants to take: “Weren’t we just saying that in the future we will be able to choose our bodies? And to change them? Think of yourself as future-early” (Winterson 2020: 119). Claiming that Ry is future-early confirms that Victor believes that future transhumanist bodies are an inevitability.

Rizzuto and Fost’s (2012: 570) insight into using medical means to enhance the body can be seen in the example of hormone treatments used by Ry: the intake of testosterone changes (at least somewhat) what a body is capable of doing. For them, it means that they have been able to build muscle mass more easily (Winterson 2020: 120). Ry discusses their own body as well, first relating back to the surgeries they have had after Ron Lord asks them if they are a woman or “a bloke” and comments that they have “a bloke’s hands”:

My build is slender. Narrow hips, long legs. When I had top surgery there wasn’t much to remove, and the hormones had already altered my chest. /--/ I like my chest the way it is now; strong, smooth and flat. /--/ [W]hat I am is not one thing, not one gender. I live with doubleness (Winterson 2020: 89).

Once again, certain hybridity is brought out, both when discussing Ry’s gender and their body, which suggests that Ry’s body can be viewed as being transhuman. They have picked the changes so that they could achieve the body they wish for: “I’m in the body that I prefer. /--/ I did it [had surgery] to get nearer to myself. /--/ I had it made for me” (Winterson 2020: 122). Additionally, Ry says that they’re “fully female /--/ also partly male” (Winterson 2020: 97), which again highlights the hybridity they embody and feel.

It is unsurprising that Ry as a transgender protagonist is chosen for the book. Transgender people often find that their bodies are not as they want them to be and therefore look for ways to change them. Ry themselves discusses why they are a transhuman enthusiast:

“I am part of a small group of transgender medical professionals. Some of us are transhuman enthusiasts too. That isn’t surprising; we feel or have felt that we’re in the wrong body. We can understand the feeling that any-body is the wrong body” (Winterson 2020: 104). While a body might be wrong and can be corrected by enhancing it or replacing some parts, Ry agrees that perhaps it would be the best, for some transgender people, to not have to worry about a body at all. The necessity of a body is discussed in relation to dating and the questions of what would happen to sexuality if there is no body to feel attracted to and if it would be enough to like someone and then pick a form for the mind: “It would be like it was in the past, when there were pen pals but no cameras /--/ Maybe we’d get to know someone and when we were ready we’d download ourselves into a form and –“ (Winterson 2020: 310–311). Ry finds comfort in the thought of being able to pick a form for the consciousness once two people have gotten to know each other while Polly is very sceptical, supposing that then labels (which people identify with and find comfort in) will not matter at all, and both finding an identity and a partner will be more complicated. She especially claims that “we hate [labels] but they’re part of the attraction” (*Ibid.*).

Another thing to link Ry’s body and transhuman cyborg or enhanced body is the way embodiment could work. If according to Crawford and Halberstam (Halberstam 2019: 24) transgender embodiment is a series of steps or stopovers, the same could be said for the transhuman body (cf Kurzweil in Thweatt-Bates 2016). The embodiment is developed and changed gradually both for transgender people and for transhumans; transhuman embodiment can include the usage of medicines and changing the body with prosthetics, the same can be said for transgender embodiment when hormonal therapy and gender-affirming surgeries are undertaken. Additionally, the habitus and stylisation of the body can change depending on what has been changed – the posture of a person can change if they have a double

mastectomy or if the breast tissue has been emulated with silicone fillers, and if a person gets a bio-prosthetic instead of having no prosthetics or a regular prosthetic limb.

However, their body cannot be considered transhuman only because they identify as transgender and have undergone changes. Hayles (1999: xi–xii, xiv) has claimed that we are already posthuman and cyborgs because we integrate technology into our daily lives and this can be said for Ry as well. For example, they use their smartphone to film Ron Lord's sexbot interacting with people (Winterson 2020: 37) and to contact people. Hayles has also said that integration between intelligent machines and humans is an important matter in posthumanism, and Ry interacts with the robots as well as with technology, for example, using their smartphone to contact people. This nevertheless is a very small part of what makes someone transhuman.

2.3.7. Discussion – How Serious is Winterson?

Although Winterson plays with the idea of transhuman bodies becoming a reality in the future, the way she writes about different transhuman bodies, ranging from prosthetics to hands that run around the walls to transgender bodies shows that Winterson does not share Victor's or Ry's vision of a transhumanist future. Instead, she seems to be ironic about it, especially as she describes a decapitated head that has been frozen and stolen to be reanimated, and the amputated hands that roam around the room, controlled by computer chips but still blind to the environments as there is not much to do with the information that the hands receive and give to the computer. It is hard to see the hands as transhuman entities even if they are grotesque enough like different creatures known from posthuman and transhuman fiction and visibly different from what we would consider human or non-human animals.

Winterson furthermore shows how forms of artificial intelligence can be integrated into our lives – first starting as iPals for little children, then moving to helpers around the house and finally as sexual companions. This also can be seen as a comment of commercial and capitalistic culture that will “grow” children to get used to such artificial companions. Even the sex robots that Winterson crafts in the novel are exaggerated versions of today’s sex dolls. Winterson makes fun of these sex dolls speaking explicit phrases by showing how if some wires get crossed or if someone accidentally turns the doll on (mind the phrasing), she/it will not quiet down and will loudly proclaim her/its wish to have all sorts of sexual acts performed on her/it. Ron Lord’s sex robots are a fantasy but the different types of “girls” embody different stereotypes of women without feeling like authentic women. They are transhuman bodies – artificial intelligence without being a new life form – that has been developed for a purely commercial purpose. They stand out as the Other and therefore will need to be “hidden” in people’s closets or in the trunks of cars, where they will fit, according to Ron. This, too, is Winterson’s comment on the objectification and use of women, showing that transhumanist thought has not realised feminist hopes but has instead cemented the status quo. While transhumanism has grown out of posthumanism that according to Clarke (2020: 91) should empower people who have not been in the status quo and narrow the gap of differences between people of different genders and races as well as between people and nature, this has not been realised in the novel. The novel clearly shows that transhumanism is still the “playground” of men who experiment with technological, artificial and flesh bodies or creation of them.

While she discusses the (re)creation of a body, Winterson does not discuss childbirth in the light of transhumanism which appears within Ry’s story. Although she rewrites Mary Shelley’s life with experiencing pregnancy, childbirth and losing the child as well as having to get over the grief quickly when another pregnancy occurs in the 1810s and 1820s,

Winterson overall does not dive deep into the ideas of what could happen with reproduction in the 2010s and 2020s, as it could be possible to not only reduce pregnancies through the continued use of birth control but also to offer a woman more control over the pregnancy, through medical or technological means. Another idea that is forgotten is that of artificial bodies becoming available to relieve humans of carrying a child and birthing them like Firestone (1970) hypothesised.

The other transhuman bodies are also seen through a slightly ironic lens. Winterson's novel somewhat exoticizes Ry's transgender and changed body. To use Hayles' (1995) terminology and thoughts, Ry's body was at first a problem for them, something that had to be fixed. Through medicine, the problem of their body has been mostly fixed and now, the body has possibility written on it. This is done by other characters and Ry (and by extension Winterson herself) calls this sort of behaviour into question. Ry argues against being seen as the ideal future body or "future-early". They see themselves simply as a hybrid, a mixture of female and male. However, through Stryker (1994) and Butler (2014), it is possible to see that Winterson could have wanted to use a transgender protagonist to show that with a recreated creature or monster, even with sex robots in play, the transgender person is the one who is seen as the other and their existence and identity is questioned and in some cases, they may be outcast. Ry also is similar to Mary Shelley as they are the one who creates the doctor, someone who can make monstrous flesh-technology creatures. Shelley creates by writing and Ry by stealing body parts for Victor.

Ry and Victor are connected not only through their professional relationship but also through their personal relationship as Winterson establishes that Ry's body excites Victor. Although Ry has changed their body and is open about talking about it, in the novel Winterson is ironic about the notion of everyone being able to choose what their bodies will be like in the future, removing, altering or adding to the body often on a whim. She does this

by letting Victor speak about how he would like to have wings if it becomes possible to change the appearance of the body and by letting the characters discuss which animals and vegetables they would and would not like to inhabit if it became possible to upload a consciousness to later download it into a carbon-printed body.

Even if some of Victor's ideas are possible, at the end of the story Winterson makes him disappear from the bunker and the madhouse. Victor Frankenstein who appeared in Mary Shelley's *Frankenstein*, the man in Bedlam by the name of Victor Frankenstein and Victor Stein all are "future-early" in their thinking. All three of them are seen as madmen simply because they would prefer to reimagine life or to reanimate life, something that is not ethically or morally accepted by the general public of either time. They are all future-early but Victor Stein is the one who is the closest to being almost in time as his experiments are not seen as too radical, just slightly odd. However, as he disappears by the end of the novel, it is also possible that cryopreservation and reanimating a head is so much in the future that Victor is out of place in all times that he appears.

Perhaps Shelley's Victor Frankenstein would have fit into today's society as nowadays reanimating the dead is not frowned upon although nowadays heart defibrillators are used and not lightning, and the people have to be dead for a very brief time. Nowadays it is also common to use organ transplants from dead people in already living people and therefore creating hybrids or "creatures" like that. Victor Stein, however, is years ahead of what we consider morally and ethically acceptable and therefore he is transported into another time. Although it can be considered that he is using amputated hands and arms to build better prosthetics, the limbs he is brought have been stolen and not freely given. This raises additional ethical concerns about bodily autonomy. We do not currently see it ethically correct either to try to reheat someone's brain in hopes to bring some sort of life back to the person.

Where and when he is transported is left unanswered in the novel. When Mary Shelley sees a man approach, it may be Victor Stein that has been transported back more than 150 years to see the birth of machines but it also may be the Victor Frankenstein from Shelley's novel, and the Victor Stein from Winterson's own narrative is shunted through time into the future when he would not be an outcast for his theories and ideas.

CONCLUSION

In the 20th and 21st century, many questions about what the human is in relation to nature and the advancements in technology have arisen. These questions are analysed in posthumanist discourse that questions the nature of life and the bodies that inhabit nature, and in transhumanist discourse that discusses the boundary between humans and technology. Similar questions emerged in the 19th century. Mary Shelley's *Frankenstein* (1818) was one of the first of many novels to deal with (re)creating life and its ethics, drawing on Shelley's own experiences with life and death related to pregnancy.

In 2018, Jeanette Winterson repackaged these fears, Mary Shelley's biography and her *Frankenstein* and reanimated the storylines into her own creature of a novel. Winterson's novel focuses on gender, body and embodiment through trans bodies. Furthermore, the novel questions what is human and what it will be in relation to technological advancements, the limitations of the human body and the boundaries between human and non-human, sex and gender, male and female, man and woman. These previously rigid binaries are tested in the context of posthumanism and transhumanism and it seems that Winterson's novel enters into a dialogue with both.

The thesis aimed to find out how different transhuman bodies are portrayed in Jeanette Winterson's *Frankissstein: A Love Story* (2018). To answer this question, first, the theoretical chapter gave an overview of posthumanism and transhumanism, two terms that are sometimes used interchangeably. In this thesis, posthumanism is used to mean the strand of philosophy that moves away from the humanist legacy and anthropocentrism towards a worldview in which human and non-human entities are both appreciated. Transhumanism, on the other hand, is the strand of philosophy that wishes to overcome the body or to fix it with the help of science, technology and medicine.

Both post- and transhumanist thought takes interest in hybrid bodies, like cyborgs popularised by Donna Haraway. For Haraway, the cyborg is a hybrid of human, animal and machine who fits into the ideal genderless and race-less civilisation and is connected to machines and technology. Halberstam (1991) claims that Haraway, in her cyborg, does not see femininity as a given but as a coded masquerade. In addition, there are enhanced transhuman bodies, androids or other modified bodies that blur the line between machine and human. We can also add the reanimated body, which we can see in Shelley's work, but which has today become a reality through organ transplants.

Embodiment can be seen as a series of patterns rather than a presence, something that comes from repeated acts, which can be changed and adjusted. Gender theorists have emphasised that just like embodiment, the body gets its gender through everyday repeated acts. Judith Butler and Susan Stryker talk about performativity that helps construct a transgender identity and, according to Stryker, this *habitus* or replicated pattern-making, includes hormone replacement therapy and gender affirmation surgeries. Halberstam (2019: 29) talks about "chemical scripts" which help to produce embodiment by using, in the case of transgender people, hormones and MacCormack (2009: 123) relates people who are neither men nor women to hybrids or cyborgs.

Frankenstein's creature is brought into the embodiment of a transhuman or transgender subject through Susan Stryker's (1994) and Judith Butler's (2014) works. Stryker says that because of her embodiment, she, like the creature, are seen as less than human, while Butler brings attention to the creature's gender which they claim is neither properly male nor female. Stryker, however, sees the creature and its embodiment as empowering. Through Butler's and Stryker's works it is possible to see how transhuman and transgender embodiment can be constructed similarly while the embodiment itself is under the scrutiny of others.

To see how Jeanette Winterson combines different transhuman bodies and the body of a transgender character, the thesis utilised the method of close reading to read with the grain. While critical reading has to be used, the thesis tried to suspend any outright judgement and to engage with the potential of the text, especially the thematic choices and word choices. The discussion of the novel is divided into seven subsections – six that deal with different transhuman bodies in the novel and a seventh that is a discussion subsection.

The analysis shows how Jeanette Winterson's *Frankissstein* features different types of transhuman body: recreated or reanimated body and body parts, transhuman body as the brain, artificial intelligence as an emerging new life form as well as sex robots, and the trans body. There are multiple ways of seeing transhumanity and the transhuman body and Winterson represents these bodies in the novel by different means. Winterson loans much from Shelley's work and transfers topics from the 19th century to the 21st century. Recreating or reanimating life is still a relevant topic although today's ethical concerns are different from those of the 19th century. No longer is reanimating a dead body seen as immoral, especially if the person has been dead for seconds or minutes – if reanimation is successful, it is counted as a medical victory and a dead person's organs may be harvested to prolong the life of a living person. The possibility of reanimation through cryopreservation is a matter of scientific debate. However, Winterson brings up ethical concerns that may arise from picking some body parts to be more relevant than others, especially in discussing how the mind and body divide still is ingrained in transhumanist thinking and how embodiment may change drastically, especially if uploading the brain becomes possible. Winterson treats these ideas ironically and the protagonist of her book, Ry, brings attention to how humans will not be prepared to leave behind their flesh bodies. Additionally, Winterson comes to the same conclusion as Mary Shelley – it is unethical to conduct animal testing on humans.

Flesh bodies may make a human but Winterson discusses alternate life forms that are beginning to appear. She takes note of artificial intelligence and companionship robots but packages them into sex robots to remind the reader that while such innovations have the potential to lessen the workload of women, as feminist thinkers hoped, today's commercial enterprises are more likely to fulfil the fantasies of (heterosexual) men and further contribute to the objectification of women. By describing the sexbots, Winterson shows that although feminist thinkers dreamed of artificial life forms to relieve women of childbirth, in current transhumanism at least, these hopes have been abandoned. Men do, indeed, seem to get more attention and time to talk about transhuman evolution, which Winterson highlights through the character of Victor Stein. Although these sex robots appear, we are not seeing entities who could be called androids or cyborgs; if Haraway's cyborg is the most known in popular media, Winterson focuses on hybrids whose hybridity may not be outright visible.

Finally, the thesis analysed how transhuman embodiment is discussed through the novel's transgender protagonist. Ry, the transgender character, does not see themselves as a man or a woman but as a hybrid of man and woman. It is possible to see Ry as Haraway's cyborg because of this hybridity. Although they find comfort in this hybridity, other characters use it to see Ry as the Other. Their gender causes confusion to Ron Lord, the creator of the sexbots that capitalise on the heteronormative binary gender system, but excitement in Victor Stein who sees transgender people who have changed their body as transhumanist progress. Victor thinks of Ry as "future-early" (Winterson 2020: 119). Winterson's novel doubts that people will accept having no bodies or being mere consciousnesses and getting to choose whichever body they can be downloaded into because. "[a] body is what we know" (Winterson 2020: 266).

Winterson's approach to the trans body seems to overlap with what Halberstam discusses - transgender embodiment consists of gradual changes and there is no telling when

these changes are final and when they will continue. In a similar vein, Kurzweil suggests that artificial intelligence forms will appear next to biological life forms and that uploading will become available. This idea is brought up by Ry and they seem to find some sort of comfort in knowing that the body may not be what causes someone to lose attraction or build attraction if everyone's consciousnesses have been uploaded and if the body can be picked.

Overall, it can be said that Winterson is ironic in presenting these different forms of the transhuman body. The sex robots do not function properly, characters do not believe that artificial intelligence can truly help people, amputated hands that crawl around may have a grand purpose, but they look grotesque, a brain is waiting to be reheated, in vain, and a transgender person's body modifications are what makes them attractive to a scientist. In the context of the novel, there is still a long way to go until these transhuman enhancements are substantial enough to give people the feeling that they have finally reached the next stage in evolution – one that they have chosen for themselves.

The novel is a good starting point to understanding debates surrounding transhuman and transgender embodiment, technopessimism and artificial intelligence. Possible further research could research how transgender or transhuman bodies are represented in other novels written in English in the 21st century. This topic, after all, is one of the more burning issues of our time when technology changes fast and we are facing many important ethical questions about how to integrate the human and the technological.

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RESÜMEE

TARTU ÜLIKOOL
ANGLISTIKA OSAKOND

Amanda Poopuu

Transhumanism and Transhuman Body in Jeanette Winterson's *Frankissstein: A Love Story* (2018) [Transhumanism ja transhumanistlik keha Jeanette Wintersoni romaanis „Frankissstein: A Love Story“ (2018)]

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Magistritöö eesmärgiks on analüüsida, kuidas Jeanette Winterson oma 2018. aasta romaanis *Frankissstein: A Love Story* kujutab transhumanismi ja transhumanistlikke kehasid.

Sissejuhatus annab ülevaate teadusulme kui žanri populaarseks muutumisest ning Mary Shelley romaanist *Frankenstein* (1818), arutletud on ka erinevate põhjuste üle, miks Shelley valis romaani põhiteemaks elu (taas)loomise. Lühidalt võetakse kokku, kuidas Jeanette Winterson kasutab Mary Shelley elulugu ja teksti enda romaanis ning Wintersoni romaani retseptioon. Töö esimene peatükk annab ülevaate post- ja transhumanismist kui filosoofia mõtteliinidest, Donna Haraway küborgist ja selle kriitikast, transhumanistlikust kehast ning kehast, sotsiaalsest soost ning sellest, kuidas kujuneb kehalisus.

Töö empiirilises osas kirjeldatakse täpsemalt analüüsi meetodit, milleks on kombinatsioon lähilugemisest ja päripäeva lugemisest. Järgneb detailsem *Frankissstein: A Love Story* süžee kirjeldus. Töö analüütilised alapeatükid kirjeldavad erinevaid transhumanistliku keha vorme ning kehaga seotut ja analüüsivad, kui tõsiselt suhtub Winterson kirjeldatusse. Vaatluse all on elu (taas)loomine, erinevate kehaosade olulisus transhumanismis, tehisintellekt ning robotid kui paralleelsed eluvormid ja transsoolise tegelase keha. Analüüs näitas, et kuigi Winterson kirjeldab erinevaid keha vorme või võimalusi, kuidas transhumanismi mõtteid kasutades saab keha säilitada, muuta või sellest hoopis lahti saada, on Winterson skeptiline, et sellised muutused valutult või lähiajal tavaellu integreeruvad.

Märksõnad: briti kirjandus, posthumanism, transhumanism, soouuringud, transsoolisus, kehalisus, transhumanistlik keha, Jeanette Winterson, Frankenstein

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