



UNIVERSIDAD DE JAÉN
Facultad de Humanidades y Ciencias de la Educación

Posthuman Identities in Philip K. Dick's *Do Androids Dream of Electric Sheep?* and Marge Piercy's *He, She and It*

Alumno/a: **María Robles Lorite**

Tutor/a: **Prof. Cinta Zunino Garrido**

Dpto.: **Filología Inglesa**

Septiembre, 2016

1. Introduction	3-5
2. A Posthuman Vision	5-6
2.1. Definition	6-7
2.2. Differences among terms	7-8
2.2.1. Posthumanism and Humanism	8-9
2.2.2. Posthumanism and Transhumanism	9-11
2.3. Backgrounds	12
2.3.1. Social-historical background	12-13
2.3.2. Philosophical background	13-14
2.3.2.1. Bioethics	14
2.3.2.2. Strong AI (Artificial Intelligence) and weak AI	15
3. Science Fiction: Cyberpunk narratives	15-20
3.1. Speculative Science Fiction	15-17
3.2. Cyberpunk	17-19
3.3. Utopia and dystopia	19-20
4. Posthuman in practice: the novels	21-28
4.1. The life of the authors and their context	21-22
4.2. How are these novels connected?	22-23
4.3. Analysis of Posthuman features	23-28
4.3.1. <i>Do Androids Dream of Electric Sheep?</i>	23-26
4.3.2. <i>She, He, and It</i>	26-28
5. Conclusions	28-29
6. Works cited and other resources	29-31

Abstract: The aim of this project is to analyse the term posthuman in the literary context. Two science fiction novels are commented to define how it is portrayed in fiction. The project is composed by three main parts: the two first ones give a theoretical explanation of posthuman theory and the literary frame in which it emerges; the last one deals with the analysis of the works of two science fiction authors –Philip K. Dick and Marge Piercy-. Their novels express different representations of what being a posthuman may be in a future society. The authors look into the ethical implications of the worlds they imagine to exist through their novels. Moreover, they take into consideration the reflection about contemporary topics such as the need of protecting the environment, the relevance of cyberspace in daily life, technology affecting the way of living, etc.

Key Words: posthuman, science fiction, cyberpunk, artificial intelligence, literary analysis.

Resumen: El objetivo de este TFG es analizar el término posthumano en el contexto literario. Comentaremos dos novelas de ciencia ficción para definir cómo éste es representado en ellas. El TFG se compone de tres partes: las dos primeras proporcionan una explicación teórica de la teoría del posthumano y del marco literario en el que aparece; la última parte se ocupa del análisis de las obras de dos autores de ciencia ficción –Philip K. Dick y Marge Piercy-. Sus novelas expresan las diferentes representaciones de lo que un posthuman podría ser en una sociedad futura. Los autores indagan en las implicaciones éticas de los mundos que imaginan a través de sus novelas. Además, reflexionan acerca de temas contemporáneos como la necesidad de proteger el medio ambiente, la relevancia del ciberespacio en la vida diaria, los efectos de la tecnología en el día a día, etc.

Palabras clave: posthumano, ciencia ficción, cyberpunk, inteligencia artificial, análisis literario.

1. Introduction

“What makes us human?” has been one of the main existential questions made by humans since the origins of rational thought. This questions has been discussed through different philosophical schools of thought along history. Many other similar questions overlap the first one: “What is personal identity?”, “What is human role in the universe?” and so on. So the perception of which elements constitute human nature has shifted on different occasions. For instance, the introduction of technology in a big number of domains (medicine, engineering,

education, etc.) has changed the way in which human beings interact with the environment. Nowadays, implants are more and more frequent and they are becoming an accepted reality for human bodies which lack some part or need them to function properly. The human body may not entirely be biological at all. Another shocking data is that plastic surgery is increasing unstoppably each year. So human body is being modified once and again for aesthetic purposes around the world.

In addition to this, it is argued that human consciousness (one of the facts that characterizes us as humans) is expanding through the power of technology. For instance, everyone is connected to each other through social media, email, mobile phones, forums, etc. To be in one place, at one given moment, now does not count as a boundary to talk to someone who is, at the same time, in another continent. Therefore, there is a non-physical space -the cyberworld- where it is possible to exchange conversations, feelings, opinions, information, etc. The similarity of human cognitive processes with computer processes is becoming more and more alike, even though they are not identical. The humanoid android becomes here a project for researching. “Is it possible to create an artificial intelligence that shares human features such as consciousness, feelings or morality?”

In a novel way, these physical and mental connections to technology are affecting how humans perceive themselves in relation to the world they experience. It would be not shocking to find that ‘artificial intelligence’ conforms one of the most reproduced playlists in *TED talks*, which are powerful talks devoted to spreading new ideas. Humans are expected to be able to ‘evolve’ through the application of new technologies. Brain processes may be developed until reaching unimagined possibilities that would let them experience reality in a whole new light. In fact, Neil Harbisson, the first denominated ‘cyborg’, is an artist that was born with acromatopsia, a condition that makes him color blind. He is able to listen to colours with the help of an ‘eyeborg’, an integrated form of technology that permits him to translate colours into musical notes. He comments that this technological enhancement expands his senses, which go beyond normal abilities.¹

¹ Neil Harbisson’s *I Listen to Color*. [Retrieved from http://www.ted.com/talks/neil_harbisson_i_listen_to_color] Further documentation on his website: <http://cyborgproject.com/>

The posthuman takes its relevant place in cases like the one mentioned above. As it will further explained in this research, science fiction novels have been able to anticipate and imagine how human beings would change due to technology. They take the ideas, arguments and questions of Posthumanism arguments and create plots which develop them. As a consequence, it is necessary to know the main features of the posthuman and the theories that surround it. The practical part of this work, the analysis of the novels that forms part of the title, will deal with the implied possibilities of transcending a human identity, and the posthuman futures that worry or inspire hope, that are explored in science fiction narratives.

Therefore, in the following text it will be discussed, first, the term posthuman, the reasons why it is important to study this phenomenon and its relationship with the literary and philosophic worlds. Then, the literary context in which the novels are set will be introduced: science fiction and, specially, cyberpunk subgenre, will be focused on to develop the research. Finally, the two novels chosen as corpus for reflection and analysis will be commented about, establishing their relationships with the posthuman. The novels chosen for this purpose are Philip K. Dick's *Do Androids Dream of Electric Sheep?* –the book from which Ridley Scott inspired himself for the cinematographic adaptation, *Blade Runner*–, and Marge Piercy's *He, She and It*. Both novels are set on a future Earth, where life paradigms have been modified due to human actions such as nuclear wars, the devastating effects of pollution, the great development of technologies and artificial intelligences, a closer relationship with the cyberspace, etc. As speculative science fiction novels, the metaphysical and moral implications of all these changes on societies and, most importantly, in one's self identity, will appear along the narratives.

2. A Posthuman Vision

“Posthuman” originates under the belief that is possible to reframe the definition of human, which appeared in Humanism and the Enlightenment, thanks to the effects of technological and scientific developments. Human beings always have made use of the surroundings and external resources for their survival and adaptation to the environment. For instance, discovering how to use fire during the Early Stone Age was a key point in the cultural aspect of human evolution, which allowed to cook, to get heat and light, to keep dangerous animals and insects away, etc. However, it has been discussed in the 20th and 21st centuries that technology incorporated in human lives is able to modify our perceptions of

what is a human being in unprecedented ways. The cyborgs portrayed in science fiction novels or films have been analysed as the representations of the implications of the shifting towards a posthuman era. Furthermore, actual values and ethics are being reevaluated in these stories of fiction.

Notwithstanding, there are several movements inside the posthuman discussion that assert that cyborgs (a creature composed by biological elements and cybernetic devices, which is usually designed for the enhancement of some feature –such as intelligence, for example-) are not anymore a product of science fiction, and they are considered to truly exist in the world. As it will be explained below, in the corresponding sections, “posthuman” may be defined differently according to the context in which this term is being used. That is the reason why posthuman will be analysed regarding different movements that believe in a posthumanity.

2.1. Definition

First, the term posthuman was popularised in the 1980s to declare the possibility to ‘abandon’ human condition by means of cyborg creation and bio-technology. Robert Pepperell wrote a Posthuman Manifesto in his work *The Posthuman Condition: Consciousness Beyond the Brain* (1995), which would serve as a basis for this concrete definition of a posthuman. According to Hayles in her study *How We Became Posthuman* (1999), the posthuman is born under the belief that information may circulate unaltered among different material substrates. This means that an identity (such as human identity) would be an informational pattern that takes its embodiment in a certain material substrate, which is seen as an accident of history rather than an inevitability of life.

The body is seen, under this point of view, as a materiality that may be complemented with new prostheses and which is able to be articulated easily with other technologies. The notions of ‘virtual body’ or ‘real body’ have been mixing themselves in a similar pattern. For example, in social networks such as Facebook the virtual and the material body intersect to conform an online identity. The photos, list of friends, and other personal information may create a virtual person. In short, the profile of a person online may change the perception others have of that person offline (Guillaume, Hughes, 2011).

On one hand, the term posthuman focuses, on the idea that technological modification is the direct cause of evolution and that there is not a linear way for it to happen.

Consequently, there is no certainty in the presumed evolutionary process taking place and, furthermore, the possible scenarios for this situation are multiple. The posthuman world is neither wholly understood (Roden, 2015). For these reasons, it is maintained in conceptual discussion rather than in fields belonging to the natural or technological sciences. So, the posthuman in the literary frame or philosophical frame may take more than one form, since it is a speculative future that may take place. Science fiction, specially, cyberpunk (as it will be further explained below on section three), popularised some posthuman features such as cyborg entities or genetic modifications and the moral implications of the applications of these technologies. A question generates also from these narratives: Should human values prevail over presupposed “posthuman values”? (Roden, 2015)

On the other hand, this concept should seek to achieve better conditions for living in the Earth, so the term is often used for designating new types of progress regarding adaptation to the new conditions (for example, radioactivity) and the connection of individual brains through systems of collective networks. These approaches to the term were first postulated in J. D. Bernal’s *The World, The Flesh, and The Devil: An Enquiry into the Future of the Three Enemies of the Rational Soul* (1929).

Nevertheless, “posthuman” may not mean an entity who is beyond human or non-human, although the term posthuman also makes reference to the cyborg, as mentioned above, as it appears in Donna Haraway’s *A Cyborg Manifesto* (1991). This representation has been usually portrayed in posthuman fiction. For instance, posthumans in the novels that will be analysed through this essay are often represented as cyborgs or androids. As it was stated before, the posthuman may not correspond to the cyborg built by humans, but rather:

The cybernetic posthuman is more a distributed consciousness than an enmeshing of machinery and biology, a “we” rather than an “I,” spread among parts in any system that may include biological pieces and technological parts making up a body, technologies surrounding the body (such as a computer screen and keyboard) and the body itself, or inter-species bodies. (Fierke, 2012)

Also it is considered to be a reframing of an individual that negates and subverts the dualistic conceptions of self and other, human and machine, and human and animal. For instance, rationality –which was regarded as a unique human trait- is also found in computers or robots. (Welsch, 2014)

2.2. Differences among terms

In other words, the term posthuman gives an answer to the questions formulated by the development of technology and science, which generated the necessity of redefining the concept of human. This theory may be traced back to the criticism against humanist philosophy, which presupposed universal values for the whole of the humanity and put the human in the central position of experience. It is interesting to see how posthuman refutes the liberal humanist subject to understand better the postulates of posthuman discourse.

Despite that there have been numerous academic researches about the posthuman concerning its definition, it became an umbrella term for different schools of thoughts and movements (posthumanism, transhumanism, antihumanism, new materialisms, etc.) Posthumanism and transhumanism are the two school of thought that prove more difficult to differentiate between each other because they share the same interests and topics, which usually overlap, and they perceive in a similar way the human as a non-fixed and mutable condition (Ferrando, 2013). So, I will differentiate between the terms posthumanism and transhumanism because they are the two ones that brings more confusion since “posthuman” is a term used by both to sustain their thesis, but they understand it in a distinct manner.

2.2.1. Posthumanism and Humanism

In the first place, posthumanism may be considered a school of thought that promotes the reconceptualization of what it means to be human (Cuddon, 2013). It began under the reflections given by postmodernism (the movement departing from modernity in the 20th century; it rejected notions such as absolute truth, rationality, human nature, etc.) and poststructuralism (which turns down logocentrism and eurocentrism as well as the existence of a transcendental subject). Nevertheless, it was develop by feminist theorists in the field of literary criticism, in the 1990s, although cultural studies also share their interests on this topic. At the end of the 1990s, it began to be analysed by the field of philosophy, taking into account the limitations of humanistic assumptions (Ferrando, 2013).

As observed above in point 2.1. *Definition*, the construction of the posthuman is articulated by its disembodiment of material subtracts. This idea is connected to the liberal humanist subject, which is defined as “a coherent, rational self, the right of that self to autonomy and freedom, and a sense of agency linked with a belief in enlightened self-interest” (Hayles, 1999). Humanism was a cultural and philosophical movement which was characteristic of the Renaissance, beginning at the 14th century in Italy and expanding then

through Europe. It rejected Medieval theocentric philosophy (god was the centre of the universe and gave meaning to existence) and acclaimed the importance of anthropocentrism (the individual subject was then at the centre of the universe). Humanism followed the classic authors and thinkers because they believed that “man is the measure of all things”, as the Greek philosopher Protagoras stated.

Posthumanism often generates itself in the late 20th century as a deconstruction of the liberal humanist subject, which have been criticized before by feminist theory, colonial theory and was linked to capitalism, since humanism erased the differences in order to give more value to the universal (Hayles, 1999). Also, posthumanism formulated itself against the idea of humanist naturalness, which states that there is a genuine and authentic nature (Cuddon, 2013). However, the liberal humanist subject and the posthuman are not dissimilar in every way. Both Humanism and Posthumanism are linked to science since the universe and the human body are domains of study. The first subject had a physical body, which was not presented as being a body, whereas the second subject only treats the body as a layer of information. As a result, they both have in common the recognition of cognition over embodiment (Hayles, 1999). Changes are taking place very quickly in the world so the liberal humanist subject is no longer able to explain the relationship between one’s consciousness and the outer world. Thus, it becomes necessary to revise and formulate again the features of humanism. As Welsch exemplifies on this topic: “the specifically cultural nature of the human, for example, might be a point to be kept, whereas claims to superiority are to be dropped” (Welsch, 2014).

Authors commenting on the posthuman present divergent understandings on what its meaning is. However, they use the term posthumanism indifferently to make reference to both definitions. For instance, Moravec’s posthuman is connected to the liberal humanist subject remarked above. His project consists of “downloading” a brain’s content (as information) into a machine or computer in order to liberate the subject from the “boundary” of embodiment and confide in the totality of reason. It is also interconnected with the Platonic tradition of duality (mind versus body). Deleuze’s discourse in posthuman and cyborg theory is a critique to this notion of subjectivity and it affirms the materiality as a fundamental characteristic of the mental (Guillaume, Hughes, 2011). The first manner of understanding posthuman will be defined under the term transhumanism and it must be differentiated by the other discourse, posthumanism.

2.2.2. Posthumanism and Transhumanism

The term transhumanism was coined by Julian Huxley in 1957, in an essay titled *Transhumanism* that appeared in *New Bottles for a New Wine*. He pinpointed within it the ability to be an agent in the natural landscape and to modify the world around us to take advantage of it and keep on surviving. He believed that human destiny was to evolve in the near future in order to conceive a new kind of specie:

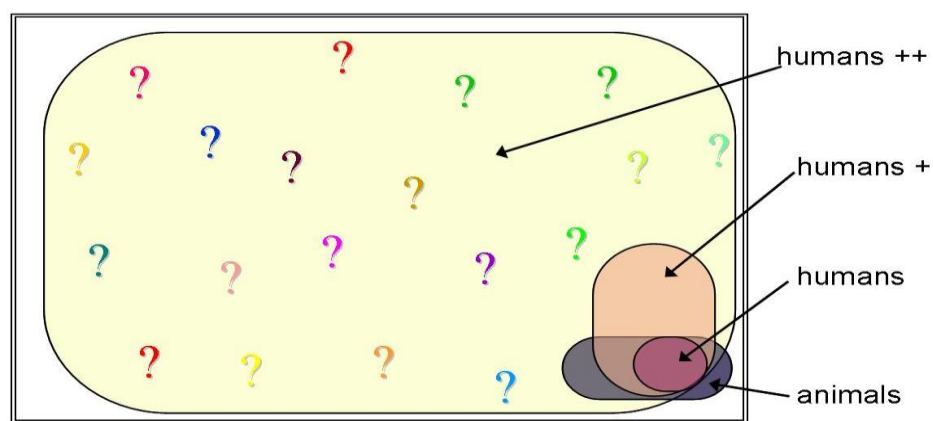
The human species can, if it wishes, transcend itself —not just sporadically, an individual here in one way, an individual there in another way, but in its entirety, as humanity. We need a name for this new belief. Perhaps transhumanism will serve: man remaining man, but transcending himself, by realizing new possibilities of and for his human nature. (Huxley, 1957)

However, his preoccupation to overcome the natural boundaries of humans may be linked to the fact that he was an outspoken member of the eugenics movement –which defended the sterilization of people with “less-desirable” genetic codes (for instance, people with disabilities or people belonging to oppressed and marginalized groups). Therefore, the idea of transcending, in this context, implied the exclusion and extermination of human people, which is completely immoral.

The contemporary meaning of transhumanism comes from the work *Are You a Transhuman?*, written by F. M. Esfandiary in 1989, in which the author gave the name ‘transhuman’ referring to the “manifestations of evolution”, that in his opinion have triggered the starting a new era of possibilities (Stableford, 2006). Transhumanism, then, may be defined as the perceived necessity to evolve through technological means, in a way that is ethical and that does not cause any harm. In order to be a posthuman, according to transhumanism, one of these three categories should be enhanced to a higher degree, unattainable without technology: health span, cognition or emotion (Bostrom, 2006). In 1998, many members belonging to the transhuman movement (Anders Sandberg, Nick Bostrom, David Pearce, Max More, Natasha-Vita More, etc.) signed the *Transhuman Declaration*, postulating the principles of transhumanism. The two main principles were:

- (1) Humanity will be radically changed by technology in the future. We foresee the feasibility of redesigning the human condition, including such parameters as the inevitability of aging, limitations on human and artificial intellects, unchosen psychology, suffering, and our confinement to the planet earth.
- (2) Systematic research should be put into understanding these coming developments and their long-term consequences. (World Transhumanist Association 1998) (Roden, 2015)

Transhumanist interest on rationality, progress and optimism may be traced back to the Enlightenment philosophy of the 18th century (Ferrando, 2013). In the Enlightenment, intellectuals tried to find the truth and discover the laws ruling nature and society. They tried to rationalise all the phenomenon and turned down irrationality; reason was the method used to reach knowledge about reality. Transhumanism reckons that biological boundaries did not allowed earlier the kind of evolution expected. They think that the NBIC (nanotechnology, biotechnology, information technology, and cognitive science) will inaugurate the progression.



2

The picture above shows the difference between the posthuman understood by posthumanism (humans +) and transhumanism (humans ++), which means that, in the later definition, the posthuman is not considered to have emerged in reality yet. Hence, posthumanism is considered a critique against humanist postulates, as mentioned above, and it emphasizes “a change in our understanding of the self and its relations to the natural world, society, and human artifacts” (Bostrom, 2006). Meanwhile, transhumanism may be defined as the possibility of trespassing human condition through technology, cybernetics, networks, etc. in order to become a better version of ourselves (physically, mentally or emotionally). It does not assume that there would be a change in how human beings are defined, as happens with posthumanism (Bostrom, 2006).

Posthumanism and transhumanism share similar interests in technology. But technology is not the main interest of posthumanism, whereas it is in transhumanism. In posthumanism, technology is portrayed as being integrated into human domains. If future

² Image retrieved from <http://www.posthumanism.com/>

worlds are imagined (like in the novels which will be commented upon), posthumanism does not show a vision of disconnection between technology and the human setting. For example, posthumanism discuss about space migration but it does not support space colonization due to its postmodern and postcolonial roots (Ferrando, 2013).

2.3. Backgrounds

As noted above, posthuman entities were analysed by different focuses. Firstly, in critical theory and then in literary and philosophical frameworks (Hayles, 1999). Moreover, posthuman discussion, belonging to science fiction, began to be taken into consideration by other fields such as bioethics or mass-media discussions. The implications of new and advance technologies was the main interests of these discussions (Roden, 2015).

As a result, the social-historical background, in which posthuman discussion took form, will be briefly commented, as well as the literary and the philosophical backgrounds, which show the implications of the application of new technologies to daily life and reflect upon topics such as ethics necessary to undertake technological enhancements, or the ability to create artificial intelligence that is able to resemble very much the nature of a human being.

2.3.1. Social-historical background

The posthuman first appeared under the circumstances provoked during the II World War. Technologies proved to be destructive for human beings; the atomic bomb, launched at the towns Hiroshima and Nagasaki, was a new threat against human lives, patrimony, environmental background, etc. This reinforced the feeling of mistrusting reason and technological and scientific progress, since it could easily be used for immoral actions such as mass murders. For this reason, the creation of artificial intelligence uses to produce worry and upsetting feelings: they could be used against the survival of human beings.

The destruction of the environment is one of the biggest threats that humanity has to make face nowadays. The decay of the world gets faster and faster every day and human beings have the responsibility to stop this quick process that may end in the devastation of the environment and many species. The arrival to the moon was also imagined by human beings long before it took place. It became a reality in year 1969 and it began a path for outer space

researching, looking for a place that would be a safe spot to inhabit and of which resources may be taken.

The possibilities of the internet opened a path to facilitate communication and accelerated the flux of information in a globalised world. This highly technological world generated the fear of becoming unattached to moral, human feelings and emotions, etc. consumerism makes objects and commodities to be the ultimate goal of human activity. For example, humanities are not considered worthy to study because they do not produce commodities. Cyborgs are thought to be future commodities for human beings but, as observed in fictional stories portrayed in books or films, they are also feared to replace human identity by one that is more intelligent, more sensitive and more adaptable to the extreme conditions of a future Earth.

Science fiction stories often recreate this future scenarios showing the reaction against this apocalyptic vision. They explore new and different perspectives about the future and the fate of all the creatures living within it. Also, they create a space for interrogating the ethical codes of the actual human beings and how they are shifting. For example, these novels wonder if it is right to destroy the Earth. Lately, animals are being cared more than ever since they are disappearing due to human activity. Also, animal rights are being asked by citizens around the world.

2.3.2. Philosophical background

As Colebrook points out in her work *Death of the Posthuman* (2014), the posthuman emerges when there is a fear of self-extinction, the capacity of destroying what makes us humans, due to a climate of destruction. Regarding human evolutionary process, it is thought that the Darwinian process of evolution is still taking place. In this case, it could be a survival mechanism so that adaptation to extreme condition is achieved in the near future: “Humans will become extinct, we cause other extinctions, and also that we are extinguishing what renders us human. The climates –cognitive, industrial, economic, affective, technological, epistemological and meteorological- that render our life possible are also self-destructive” (Fierke, 2012).

This “self-extinction” generates a moment of epiphany and, consequently, the human takes conscience of some human valuable features such as empathy, art or morality. Nonetheless it

cannot be negated that today everyone is set in a situation of interconnectedness and that there is a quick process of global changes (Colebrook, 2014).

As a result, it is necessary to frame new construction in all these fields in order to keep surviving in this world in a safe way. Here comes into action the *Cyborg Manifesto* by Donna Haraway. The second novel that will be analysed, *He, She and It*, takes this essay as an inspiration for her work. The posthuman portrayed in it are what may be called cyborgs (creatures which share human characteristics combined with machines or inorganic elements). Regarding Donna Haraway's work, the cyborg appears as a "bio-mechanism of political resistance" (Fierke, 2012). Through their theorization, it is possible to reconceptualise old values and meanings referring to the subject.

So, in posthuman discussions it is possible to find Derrida's deconstruction of terms like human-machine or self-other in posthuman theory. It appeared as a critique against universal concepts that were fixed and set under humanism and it does not employ any antithesis. A posthuman could also be someone that frames its identity by being the opposite of the liberal humanist subject, the universal subject, which is the universal man that erases all the particularities. The cyborg, as it is presented in the *Cyborg Manifesto*, may be described as a being in which unconnectable dichotomies become linked, such as mind and body, human and machine, public and private, nature and culture, men and women, primitive and civilized, etc. (Calvert, 2005).

2.3.2.1. Bioethics

In this case, bioethics studies ethical questions regarding new situations due to new discoveries in technology among fields such as philosophy, law, politics, medicine, etc. These innovations would affect the future of societies so ethical studies are needed in order not to harm human beings. Some of the topics related to the posthuman discourses found in science fiction could be life in the space, cloning, enhancement of abilities, manipulation of DNA, etc. Biotic ethics, which value the preservation of life itself, the different species and the biospheres, remarks the necessity of revising the behaviour adopted towards technology.

Since posthuman is a speculative term, as seen in transhumanism (a human being that may evolve with wonderful abilities and capacities), it is unknown whether this would be a good or a bad change. It is important to remark the good aspects as well as the dangers that

would be involved. Nick Bostrom gives five levels of objection to posthuman: it cannot be done (human consciousness is thought to be inherent to human biology), it could be too difficult to create or costly, it could be too bad for society (for instance, there could be conflicts between humans and posthumans or social discrimination to one of these groups), posthumans' lives could be worse than humans', or, finally, humans could not benefit from this new condition. So, there is no certainty that a posthuman (understood as a better version of a human) could even exist in the real world.

2.3.2.2. Strong AI (Artificial Intelligence) and weak AI

Posthuman disembodiment is only able to be conceptualized if you believe in a strong form of dualism. This is related to “strong AI”, a theory that claims that a computer or a machine could be made a true mind with consciousness, intelligence, emotions, feelings, etc. The strong dualism is similar to the Cartesian division of the body as a machine and the soul. In spite of this assumption (there are two kinds of substances), strong dualism presupposes that thoughts and mental states may be not related to the biological brain (Searle, 1980).

In opposition to this, “weak AI” states that computer may study intelligence, but it is just a simulation of cognitive processes. Nowadays, some systems show independence from human decisions, but they are not systems that approach the brain of higher animals (Roden, 2015). Therefore, it will be not possible to separate brain and body as it is portrayed in some science fiction novels according to “weak AI” theory.

2. Science Fiction: Cyberpunk narratives

3.1 Science Fiction

Science fiction is a phenomenon that encompasses contemporary culture. The definition is sometimes controversial since critics do not agree on its meaning. Some of them think that it is a kind of imaginative fiction that deals with topics related to science or is based in scientific discoveries or significant environmental changes, but others states that since it is not a literary genre in itself, it does not have defining characteristics; rather, science fiction would be a marketing label: a text becomes science fiction if you say it is science fiction (Roberts, 2006).

The term was coined by the Scottish poet William Wilson in *A Little Earnest Book upon a Great Old Subject* (1851). He wanted to provide a term for fiction narrating discoveries in science. However, it was not taken into consideration at that time by anyone else since the production of that kind of fiction was scarce (Stableford, 2006). In the 1920s the term was adapted by American magazines to name the kind of material published. Since there were many types of genres belonging to fiction, they decided to give the name “science fiction” to the fiction in which one of the main topics was science. But, they did not mean that the texts versed about scientific activity and true facts, but rather to hypothesis and imagined themes that emanated from scientific ideas (Ábalos, 2009-2010). It is not important that they express the truth or the reality; the novels follow the ‘scientific method’ but only in a fictional context, answering the question ‘What if?’ For instance, a science fiction novel may deal with the more or less rational imagined consequences of space colonization in the future. For reaching those conclusions, the author must analyse how the world is functioning right now and must try to guess how the future events would take place accordingly (Roberts, 2006). This is the reason why the posthuman usually appears in science fiction novels. They attempt to explain what would happen if technologies and science were developed enough to shift actual human boundaries.

In *The History of Science Fiction* (2006), A. Roberts finds the sources of science fiction conceptions in the Greek novel (remarking the “trope of odyssey” was the origin) and works similar to Jonathan Swift’s *Gulliver Travels* (1726). However, it started to take form at the 19th century and the beginning of the 20th century. The fantastic worlds portrayed in science fiction challenged the “faith” in reason, which was characteristic of realist novels. Empiricism believed that reason could explain all human experience and therefore this convention was showed in realist novels such as Charles Dickens’ works. The characters and situations in those novels are often a mirror of the reality. The events which trigger the stories are included in the field of quotidian actions. Reason was the dominant force behind many of these stories, and many characters that had properties belonging to romanticism usually were miscarried by their overflowing emotions and died in dramatic ways.

Nineteenth-century speculative fiction included elements belonging to the imagined and speculative world. It could be said that the laws governing that fictional universes are different from the real world’s ones. For instance, it embraces genres such as fantasy, science fiction, horror, historical, etc. According to Fierke, these works of fiction stem from Darwin theory of evolution. Darwin published *On the Origin of Species* in 1859, being one of the

most revolutionary works in Victorian times. They had two main lines: texts dealing with external technologies and with biological forms. Mary Shelley's *Frankenstein* (1818), recognised as the first science fiction novel, address the topic of evolution, mutability and entanglement by creating scientifically a monster out of body parts belonging to dead people. Novels such as H.G. Wells' *The Time Machine* (1895) deal with technological enhancements and new artefacts that become extensions of bodies. Also, it presented for the first time the question of what may come after humanity. In this case, it is shown a future divided into two opposite humanoid species, the Morlocks and the Eloi.

Conan Doyle, Julio Verne, Mark Twain, Tolkien or C.S. Lewis are other remarkable examples of authors that wrote about these fantastic universes. Then, George Orwell (*Animal Farm*, 1945), Aldous Huxley (*Brave New World*, 1932) and Ray Bradbury (*Fahrenheit 451*, 1953) wrote their famous dystopic stories. Then, Isaac Asimov (*I, Robot*, 1950) and Arthur C. Clarke (*2001: A Space Odyssey*, 1968) presented future societies in which technological artefacts, flying vehicles, etc. are portrayed. The influence between the worlds of comic, cinema and literature since the years 50s and 60s achieved the popularization of science fiction. So, their motives, characters, settings, etc. are present in the collective imaginary because of this interconnections. Also, postmodernist works that are not included within the genre of fantasy also include elements that belong to it. There are many subgenres such as stories portraying superheroes, magical characters, cyberpunk scenarios, etc. (Arévalo et al., 2011).

Science fiction often develop new worlds, but they sometimes present under the surface our current world (Thomas, 2013). This is the case of many utopian or dystopian novels. The setting uses to be the future Earth, space or different universes. The anxiety generated by the proximity of a new era for humanity, in which the fears of thousands of generations are incarnated, are presented in science fiction novels. Four elements are necessary for understanding speculative science fiction genre:

1. Deep description of the science content or technologies that were plausible or accurate to the time period.
2. The novum: A plausible innovation as a key element in the speculation.
3. Big Picture: Exploration of the impact on society and humanity.
4. Nature of Science: Science and technology as human endeavors (Thomas, 2013)

The posthuman, as a topic or character in literature, is a postmodern product. It was theorized and developed mainly in cyberpunk, a subgenre belonging to science fiction. The four elements showed above give the opportunity of examining questions such as “Should we

do certain innovation in a future situation?”, which cannot be answered by science alone. It reminds that there are scientific boundaries and that science has limits. Moreover, science fiction presents the conflicts between science as being a good thing or threat for humanity (Thomas, 2013).

3.2 Cyberpunk

Cyberpunk is a subgenre of the science fiction genre. The term first appeared in Bruce Bethke's short story titled *Cyberpunk* (1983) and was popularized by Gardner Dozois, the director of Isaac Asimov's *Science Fiction Magazine*, at the beginning of the 1980s. Cyberpunk was produced by young science fiction authors between the 1970s and the 1980s, who were against classic science fiction (for instance, Asimov's works) and that was influenced by Bruce Sterling's works. *Neuromancer* (1984) by William Gibson is one of the most popular books in cyberpunk movement. It deals with a hacker that is hired by an anonymous employer to complete a hack in the cyberspace that will change the established system. Moreover, cyberpunk also has extended to film. The *Matrix* films, in which the action takes place in the cyberspace, are a good example.

These novels reinforced dystopias and political and social topics within their science fiction production. Their works warned the readers about the dangers of technology regarding the governments and the political and social power. The characters were no longer scientists or militarists that created new technologies, but antiheroes belonging to the margins of society. The narrations usually portrayed disconnected and fragmentary images, very common in postmodernism, and alienation is one of the main topics too (Cavallaro, 2000). The new technologies are not positive anymore, which surrounds the whole world. The only possibility of survival in these new scenarios is to adapt to the technologies available and to subvert them. Furthermore, for many cyberpunks authors computers, video games, videos, recorders, etc. were not part of fiction anymore, but part of the reality (Cavallaro, 2000). Cyborgs, artificial intelligence and synthetic organism are also very common in cyberpunk settings. According to Eric Schneider, cyberpunk literature is characterized as follows:

There is usually a 'system' which dominates the lives of most 'ordinary' people, be it an oppressive government, a group of large, paternalistic corporations, or a fundamentalist religion. These systems are enhanced by certain technologies (today advancing at a rate that is bewildering to most people), particularly 'information technology' (computers, the mass media), making the system better at keeping those within it inside it. Often this technological system extends into its human 'components' as well, via

brain implants, prosthetic limbs, cloned or genetically engineered organs, etc. Humans themselves become part of 'the Machine'. (Schneider, 2004)

Often, cyberpunk settings are used as a metaphor of the preoccupation about the power of technologies, the corruption of governments, technological surveillance, etc. In short, cyberpunk was a reaction towards the postmodern reality. That's why a rebellious undertone may be observed through cyberpunk texts of fiction and why ethical and moral topics are so important (Murphy, Vint, 2010).

Moreover, cyberpunk arose as a counterculture too during the 1980s and the 1990s, taking as inspiration science fiction novels. It fought against the established order and the foreseen dangers of the digital era, so it is connected to the concepts of cyber world and hackers. "Cyber", in the name, refers to the knowledge that technology may give as well as its usage. "Punk" in the word denotes a relationship with the punk movement of the 70s (cyberpunks attempted to subvert the established order in the internet through illegal actions). They were referred as "cyber-anarchists" in the internet and brought their ideals and actions into the internet. Furthermore, this subculture was opposed to the mainstream culture and focused on individualism, creativity and innovation. In 1997 Christian Kirtchev, one of the member of this movement, published a cyberpunk manifesto, in which he addressed to an underground group ("Electronic Minds") ruling the BBS, the Bulletin Board System³, which were domains of data and information exchange. He stated in the manifesto the vision about the world that this movement shared:

Some people do not care much about what happens globally. They care about what happens around them, in their micro-universe. These people can only see a dark future, for they can only see the life they live now. Others show some concern about the global affairs. They are interested in everything, in the future in perspective, in what is going to happen globally. They have a more optimistic view. To them the future is cleaner and more beautiful, for they can see into it and they see a more mature man, a wiser world. We are in the middle. We are interested in what happens now, but what in what's gonna happen tomorrow as well. We look in the net, and the net is growing wide and wider. Soon everything in this world will be swallowed by the net: from the military systems to the PC at home. But the net is a house of anarchy. It cannot be controlled and in this is its power. Every man will be dependent on the

³ Bulletin Board System (BBS) is a software, computer or application dedicated to share online electronic messages or other files, posted by and accessible to any authorized user. The BBS became the main kind of online community through the 1980s and early 1990s, before the World Wide Web arrived.

net. The whole information will be there, locked in the abysses of zeros and ones. Who controls the net, controls the information. We will live in a mixture of past and present. The bad come from the man, and the good comes from technology. The net will control the little man, and we will control the net. For is you do not control, you will be controlled. The Information is POWER! (Kirtchev, 1997)

3.3 Utopia and dystopia

This terms will be analysed since these ideas are discussed in the novels. *Do Androids Dream of Electric Sheep?* is set in a dystopic future Earth whereas *He, She and It* changes the vision from a dystopic city governed by a multinational to an utopian ‘free’ state and an anarchist state. In literary terms, utopia and dystopia are genres that envisage possible alternatives to existing societies.

On one hand, utopia may be defined as an ideal place with political and social perfection that does not exist in reality. The term was coined by Sir Thomas More in 1516 with his work under the same title, in which he described an imaginary island and explained its inner functioning. This work has two parts: in the first one, the bad situation of England is described in a dialogue, and in the second one, the island is described with all kind of details.

The neologism comes from Greek and it means “unreal place, inexistent place”. It presents a system that the author establishes to be better than the existing one but it is impossible to reach because it surpasses current possibilities. The word “utopia” may be used too with a negative connotation to refute ideas that are very unreal or idealistic. The theorization of a utopia surges when in disagreement with the society and political realities to show what should be changes or maintained. They establish ethic and political values from which a new social order emerges. So, the utopias may serve as a path that inspire people to behave better and that gives an answer to the problems. As happens with science fiction novels that explore the posthuman, utopias does not reflect the reality; they serve as descriptions of how societies would act according to the implantation of some principles. Likewise, the developments in science and technology originate the descriptions of other universes, in which society may change significantly due to the subsequent changes (Figuerola Rodríguez, 2008).

On the other hand, a dystopia consists off an imaginary society, completely opposite to the ideal one: one in which totalitarianism, lack of freedom and a very controlled society are main features. The characters live with fear and lead alienating lives. Yevgueni Zamiatin is

considered to be the creator of the dystopic genre. For instance, in his novel *We* he wrote about an oppressive political society. This kind of novels flourished between the years 50s and 60s, when the feelings of being absurd, the claustrophobia and the isolation were presented in fiction, and they rejected social situations which were not acceptable. Sometimes, dystopias describe the situation humans may reach if they do not change their behaviour towards the environment or society; and consequently dystopias emit feelings of pessimism, fatalism and fear. However, they may be very similar to the actual societies. For instance, dystopias use to present a world ruled by multinationals and they are getting more and more powerful in real life, approaching the political sphere (Figueroa Rodríguez, 2008).

4. Posthuman in practice: the novels

4.1. The life of the authors and their context

In the first place, Philip K. Dick was born in 1928 in Chicago, US. He had a twin sister that died after some weeks. This event would mark the author in his writings. He read a lot of when he was a child. He started very young to write science fiction in magazines such as *Unknown* or *Astounding*. He began to work as a shop assistant after moving from home at the age of eighteen years old. Meanwhile, he started his studies at the university, even though he did not finish them. He married five times along with life. In the 1950s, he wrote in *pulp* magazines, for example *Planet Stories*, some of his most important works. He has diverse influences on his works, such as Jonathan Swift, Stendhal, Flaubert, James Joyce, Dostoievski, Chejov, etc. His first novel was *Solar Lottery* (1955). The story is set in a time when democracy is substituted by a lottery system by which the governor of different planets is elected. His works often deal with topics related to sociology, politics, metaphysics and theology. He also based his novels in his own experience regarding drugs, paranoia and schizophrenia. His novel, *The Man in the High Castle* (1962), won the *Hugo award* (an award for the best science fiction or fantasy novel). The film director and producer Ridley Scott adapted Dick's novel *Do Androids Dream with Electric Sheep?* in the film *Blade Runner*

(1982). In 1975 he won *John W. Campbell* award for his work *Flow My Tears, the Policeman Said* (1964). He died in 1982 due to a heart attack when he was 53 years old.

Secondly, Marge Piercy was born in Detroit into a working-class family. She has published seventeen volumes of poetry and seventeen novels. She was the first member of her family to attend university and received an MA. In the 1960s, she was involved in a political movements, the Students for a Democratic Society (SDS), and the movement against the Vietnam War. She usually writes about social classes, culture and feminism in her novels, which belong to different genres or subgenres such as historical fiction, science fiction or speculative fiction. She shares many points of view of the characters in her novels, which often include a first person narrator among other third person narrators. She published *He, She and It* in 1991, titled *Body of Glass* in the UK, where she won the *Arthur C. Clarke Award* in 1993. Her work *Woman on the Edge of Time* (1976) is considered to be the first work of cyberpunk literature. She also has written a large amount of poetry (for instance, *The Moon is Always Female* (1980)), plays, nonfiction, a memoir, she has been the editor of the anthology called *Early Ripening: American Women's Poetry Now* (1988), and has been a poetry editor of *Tikkun Magazine*, which approaches Jewish issues.

4.2. How are these novels connected?

The first novel, *Do Androids Dream of Electric Sheep?* (1968) by Philip K. Dick narrates the story in the 21st century of a policeman, Rick Deckard, who is in charge of the 'retirement' –an euphemistic term referring to killing- of intelligent androids, known as 'andys'. The narration is set in a future Earth devastated after a nuclear war, in which almost all the species of animals extinguished. The population is affected severely –both physically as well as mentally- by radioactivity and dirt. Electric animals replace the organic animals and the few of them that remain are sold by very expensive prices. The novel deals with the ethical implications of 'retiring' the androids. At some point in the novel, the main character wishes to drop his job because he feels empathy towards the androids; meanwhile an android, Rachael, starts to feel human feelings such as love, desire of revenge and empathy for the other androids.

The second novel that will be analysed is *He, She and It* (1991), also called *Body of Glass*, by Marge Piercy. The story is also set in a future world devastated by the effects of

nuclear wars and pollution. Corporations govern whole towns and rule the social, political, economic and religious spheres. The exceptions are some small villages that kept autonomous thanks to technology. The narration tells the story of love between Shira and Yod, a cyborg that protects the autonomous village of Tikva. At the same time, the plot is intertwined with the story of Joseph, a Golem –an animated anthropomorphic being belonging to Jewish mythology and created magically by the Maharal of Prague-. The central plot relates how Yod, the cyborg, learns how to behave as a human being.

The novels of these authors try to give an answer to deep philosophical questions such as: “What composes a human being?” “Is it our existence valuable?” etc. that have not answer in the nihilistic moment of postmodernity. At the same time, they bring up contemporary worries that these authors had before a changing reality, without apparent meaning, in which the nihilist vision of the world was remarked. It was threaten by the possibility of losing human values. Both novels belong to cyberpunk subgenre so they share a lot of common tropes: the story are set in a dystopic future disadvantageous for society, in which multinationals, cyberspace and artificial intelligence are the central topics.

The topics related to posthuman identities that will be analysed here are: how the posthuman is constructed and its characteristics, the psychological side of the characters connected to cyberspace and technology, how the dichotomy human vs. machine is expressed, the importance of preserving the environment and the ability of surviving in extreme conditions, and the connection between animals, humans and machines.

4.3.1 Analysis of Posthuman features

4.3.1.1 *Do Androids Dream of Electric Sheep?*

In this novel, the posthuman appears in the form of the android. They are electric bodies that are identical in body and mind. It could be said that their features are enhanced: they are more intelligent and their bodies move faster. They moved from other planets to the Earth because they were enslaved and did forced labour there; so they decided to rebel and elope. They cannot be distinguished easily apart from human beings. In fact, the main character, who has the “mission” of killing them is never sure if they are human or not. The androids in the novel are not equipped with ethics and moral codes since they are a human creation, and

therefore, the androids are supposed not to have developed them. Rick Deckard uses a test, the Voight Kampff, to rate the empathy of the android or human being. If the subject is an android, the empathy levels should be very low. However, although the novel this condition is shifted.

The character Rachael, an android working for the company that invented the model of androids that are very similar to humans (nexus-6) finally gets some feelings and empathy. She cares about Rick Deckard and falls in love with him. When Deckard kills all the nexus-6 and comes back home to celebrate with his wife that he has finished his job, he discovers that Rachael has pushed the goat down the rooftop and killed it in vengeance. She is able to feel desire of revenge and commits it. Also, she cared about killing the other nexus-6 and at some point tries to protect them by sleeping with Rick Deckard. In contrast, Rick Deckard begins the search of the androids without feeling any kind of empathy towards the androids and eventually becomes empathic towards androids. So, it could be possible that Rick Deckard is also an android even though he does not realize it. He starts to feel empathy towards the androids when he meets Luba Luft, an android that hid in Earth by acting as an opera singer. He states: "I've had enough. She was a wonderful singer. The planet could have used her. This is insane" (54)⁴. Furthermore, the androids have inherent human features such as knowing that they are going to die or appreciating art. They even have a spiritual leader, Roy, who persuaded the other androids to abandon the outer space and escape to the Earth.

The animals in *Do Androids Dream of Electric Sheep?* are very relevant. In a future Earth in which almost every animal has extinguished, the few remaining ones are being sold by great sums of money. For example, it is explained that almost all the birds in the Earth are extinguished. The main character has an electric sheep that behaves exactly as a biological one. Despite that, he feels envious at his neighbour who possesses a biological horse. His objective through the narration is going to be to buy an organic and biological animal. It does not matter which one. He estimates the life of animals to be more worthy than the life of the nexus-6: The electric animal, he pondered, could be considered a subform of the other, a kind of vastly inferior robot. Or, conversely, the android could be regarded as a highly developed, evolved version of the ersatz animal. Both viewpoints repelled him. (17)

That's the reason why he insists on buying an organic animal. Since he has to kill the androids, and has started to feel empathy towards them, he will compromise himself to take

⁴ All the quotations taken from Dick, 1968.

care of a real biological animal in order to cleanse his consciousness from bad actions. However, his actions are very ironical because he “retires” androids for lacking empathy when at the same time he does not feel empathy towards the androids or the electric animals at all. Furthermore, he does not care about his wife and cheats on her. Mercer, a spiritual guide, tells him the following words to cheer him up when he starts feeling some empathy:

The old man said, ‘You will be required to do wrong no matter where you go. It is the basic condition of life, to be required to violate your own identity. At some time, every creature which lives must do so. It is the ultimate shadow, the defeat of creation; this is the curse at work, the curse that feeds on all life. Everywhere in the universe. (71)

So at the end he does not put attention to his feelings of empathy and kills the androids without remorse, taking into account the financial rewards that his work is going to generate.

Regarding mind and the posthuman, there are several examples of this. At the beginning of the novel, Rick Deckard’s wife is connected to a machine that controls the states of mind, being able to programme which one wants to feel. The story begins with a very negative and pessimistic tone: his wife has decided to programme ‘depression’ for herself, when she could have selected instead to be happy, relaxed, peaceful, etc. This presents the apocalyptic world in which the characters are immersed. They cannot go outside home a lot of time because there are elevated rates of radiation and pollution. In fact, the radiation has created people whose intellectual skills have been reduced due to its damaging effects. They are discriminated in this future Earth and are excluded of social events. In fact, Isidore, one of the characters belonging to that group –called in a condescending tone “chickenheads”-, lives alone in a desolated block of apartments. Although Isidore is considered to be less human than Deckard, due to his intellectual skills, he proves to be more empathic than the policeman. When he discovers that the nexus-6 are hid inside the block of apartments, he takes care of them and tries to protect them. Furthermore, an android, Rachael’s twin, Pris, amputates the legs of an electric spider in front of Isidore. He feels empathy towards the spider. However, he did not know that it was an electronic animal so that the narration is ambiguous in stating if electric animals’ lives were valuable. Another example is found when he tried to save an electric cat that was dying: ““I don't think Isidore can tell the difference," Milt said mildly."To him they're all alive, false animals included. He probably tried to save it”” (31).

As mentioned above, the characters use to spend their times in interiors since they cannot go outside. Most people at their homes watch a famous TV programme in which an android, Buster Friendly, is the host. It is aired at almost all times and he is a very important authority

in people's behaviour (although they are not aware that he is an android). He resembles to Mercer, a spiritual leader of humans, to whom it is possible to connect through an "empathic machine". The first one entertain people while the second one serves as a religion. At some point, Buster Friendly, shows in his show that Mercerism (as the religion is called) is a fraud. In reality, there is no "god" or "savior" called Mercer. He is a retired Hollywood actor who pretends to have supernatural powers in his studio in Los Angeles:

No, it's that empathy," Irmgard said vigorously. Fists clenched, she roved into the kitchen, up to Isidore. "Isn't it a way of proving that humans can do something we can't do? Because without the Mercer experience we just have your word that you feel this empathy business, this shared, group thing. (83)

In the quote above, Irmgard, another android, comments upon the common feature shared by humans: empathy. However, as she states, they only maintain themselves united through the Mercer experience, being as individualistic as the androids in real life.

Furthermore, it is not important at the end that Mercer was a self-made product. The important thing was that he was able to bring peace and love to the ones that went to him. He may be compared to Buster Friendly, which is also a built android whose function is entertaining people. So no one is better than the other.

4.3.1.2. *He, She and It*

In this novel, the posthuman appears in different forms. One of the main characters, Yod, is a cyborg –made from biological and inorganic pieces- programmed to protect the free town of Tikva from physical or cyber attacks, and to satisfy human desires. All his abilities are enhanced, for instance he does not need to sleep and is able to work all day long. He is intelligent and equipped with morals, languages, religion, etc. Furthermore, there is another character that is a posthuman. She is Nili, a woman that comes from another free town called the "Black Zone". She has enhanced features physically and mentally, and the possibility of living through an augmented body is regarded as the best way to interact with technology (Calvert, 2005). For example, she is able to live in highly polluted areas thanks to technology. When she is discovered in Tikva, Shira, the main character asks: "'Is she a machine or human?' She was wondering if Nili could be a cyborg. 'That's a matter of definition,' Riva said mildly. 'Where do you draw the line? Was she born from a woman?'" (191)⁵. Yod also

⁵ All the quotations taken from Piercy, 1991

has difficulties to define the nature of Nili: ““You are part machine and part human yourself,” Yod said, sounding annoyed but also curious. “We obviously share some sensors. X-ray lasers, for instance”” (195).

The environment in this novel is similar to the one in Philip K. Dick’s *Do Androids Dream of Electric Sheep?* People live under “the dome”, a layer that protects humans from radioactivity and high temperatures. If they go outside, they could easily die. Instead, in Tikva, the Jewish free town, they cultivate an ecological culture. Towns are controlled by big corporations that establish a fixed set of rules. For example, the town in which Shira works before moving to Tikva, controls the religion, the societal norms, even the hairstyles and clothes that everyone should wear, according to social classes and status. As well as in *Do Androids Dream of Electric Sheep?*, in the towns governed by big corporations there are not animals and people live among electric pets or animals.

The novel examines too how women could be subordinated in a posthuman world. For example, employers in the town where Shira worked try to take advantage of her by retiring her son custody in order to obtain data about Tikva, an independent town that survives thanks to its exportation of security technology.

Regarding mind enhancing, the characters include implants on their temple through which they may connect to the cyberspace, taking the form they want. For example, Malkah, Shira’s grandmother, connects to the cyberspace under the form of an attractive man. Attacks to the towns are usually made through cyberspace too. In this way, some members of Tikva die on the cyberspace when some hackers introduce viruses through the system. There are different devices that enhances normal abilities. For instance, when the characters plug into the net, they are able to learn faster than in reality. Furthermore, there is also the possibility of lowering the intellectual levels of some people. This action is practiced in some corporations in order to have employees that cannot rebel against them.

Shira’s mother is a hacker that tries to “liberate” information from the corporations and set it free in the “net”. As Riva says herself: “I liberate it. Information shouldn’t be a commodity” (262). There is a connection between information and freedom. The towns that have the more amount of information are the ones that can resist the attacks of big corporations and remain free and autonomous.

Even though to create a cyborg that resembles a human being is prohibited in the universe of the novel, two characters, Avram and Malkah achieve to create a cyborg similar to

a human being, after several failed trials. They refer to him as a person although not as a human. Shira, at the beginning, appears to be more confused about his nature and does not understand why they are using the pronoun “he” to refer to him, understanding that he is a machine. The mission of Shira is going to be to teach the cyborg how to behave as a human being. He ends up knowing how to appreciate art, in particular, poetry and also falls in love with Shira. But, at the end of the novel he commits suicide in order to protect the town from some attacks and erases the documents in which his creation process was explained. He did not want anyone to rebuild a cyborg anymore. Malkah and Avram decide then not to create a similar one to protect the town. This happens to be the result of Yod’s thoughts: he felt as he did not belong to humanity, and therefore he thought he was guilty to feel as he did. He was supposed to be a weapon for protection, not a human being with a life. During the narration, he is compared to another story, a retelling of a Jewish legend: the one of the Golem of Prague created by the Maharal to save the Jews of Prague. They are very similar because they have unnatural origins, they were created principally as weapons for self-defence and develop emotions, feelings and human behaviours so they want to be recognised as human beings. Also, their end is similar: they both die after protecting their people and fulfilling their mission. The meaning behind these parallel stories is meant to question what takes to be a human being: they were both created to take into action their duty, but they interacted with others and led a normal life.

5. Conclusions

It is interesting to read in these science fiction novels how the imagination of the human being may predict what will happen in the future. In the case of *Do Androids Dream with Electric Sheep?*, it may be seen as an opposition to the current usage of technology. For example, the environment and the animals are damaged in this story due to successive nuclear wars that destroyed almost everything and turned the Earth into a big bin of dirt and radioactivity. It is not exaggerated to state that this could happen in some years. Therefore, these images may help us to realize that there is a duty to preserve the Earth. The novel also includes many moral dilemmas such as “Is artificial life better than human life?” or “Is it worth to create a posthuman?”, to which the novel responds negatively.

In the same way, Marge Piercy’s novel investigates upon the ways in which personal identity may still survive in a world dominated by technologies and the cyberspace. In the

middle of a globalized world where big corporations rule entire towns, Piercy finds a way to imagine utopias: ideal worlds created thanks to technologies in which the characters are free and uncontrolled by the corporations. They also maintain their cultural and religious principles, as well as their identities. Moreover, as happens in the other novels, the text also fulfils the function of questioning about the ethical dilemmas of developing technologies. The cyborg Yod evaluated his existence wondering why it was programmed in that way and not in another way, for instance.

In conclusion, I believe that to theorize about the possible implications of the usage of technology is quite positive because science would not take in this way a dangerous approach to real human lives. It is good that scientific and technological research make our lives healthier and longer. However, research should not be conducted in order to destroy lives. There are many human beings that have no access to food or clean water, the basic things to survive. So, I believe that we are not that close to become posthuman; and if we are, the same social distinction and privileges would be maintained again between those who can have access to that technology of enhancement and those who cannot. I share the point of view that states that the posthuman discourse should try to decentralize the privileged subjects and not give advantages to the most powerful ones.

6. Works cited and other resources

Ábalos, A. *Un fenómeno denominado ciencia ficción*. Revista Borradores, Vol. X/XI, 2009-2010

Arévalo, B. et al. *Literatura universal*. Barcelona: Casals, 2011

Bernal, J. D. *The World, The Flesh, and The Devil: An Enquiry into the Future of the Three Enemies of the Rational Soul*. 1929. Retrieved from:

<https://www.marxists.org/archive/bernal/works/1920s/soul/>

Bostrom, N. *Posthumanism*. 2006. Retrieved from: <http://www.posthumanism.com>

Bostrom, N. *Why I Want to Be a Posthuman When I Grow Up*. Medical Enhancement and Posthumanity, 2006, pp. 107-137

Calvert, B. *Cyborg Utopia in Marge Piercy's Body of Glass*. The International Review of Science Fiction, autumn 2005, pp. 52-61

- Cavallaro, D. *Cyberpunk and Cyberculture: Science Fiction and the Work of William Gibson*. London: The Athlone Press, 2000
- Cuddon, J.A. *Dictionary of Literary Terms and Literary Theory*. Chichester: Wiley-Blackwell, 2013
- Colebrook, C. *Death of the Posthuman (Essays on Extinction, Vol. 1)* Open Humanities Press, 2014. [Electronic] Retrieved from: <http://quod.lib.umich.edu/o/ohp/12329362.0001.001>
- Dick, P. K. *Do Androids Dream of Electric Sheep*. Gollancz, 1968 [Electronic]
- Ferrando, F. *Posthumanism, Transhumanism, Antihumanism, Metahumanism, and New Materialisms: Differences and Relations*. *Existenz*: Volume 8, No. 2, Fall 2013, pp. 26-32
- Figueroa Rodríguez, P., López Bouzas, M., Lozano Paz, M., Martínez Costas, J. I. *Filosofía y Ciudadanía*. Madrid: Mc Graw Hill, 2008
- Fierke, J. E. *Darwin and the Digital Body: Evolution, the Posthuman, and Imaginative Spaces of Possibility*. 2012 Retrieved from: <http://conservancy.umn.edu/bitstream/handle/11299/124135/Fierke%20MLS%20thesis.pdf?sequence=1>
- Guillaume, L., Hughes, J. *Deleuze and the Body (Deleuze Connections)*. Edinburgh: Edinburgh University Press, 2011
- Haraway, D. *A Cyborg Manifesto*. In *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge, 1991
- Harbisson, N. (2012, June). Neil Harbisson: *I Listen to Color*. [Video file] Retrieved from: https://www.ted.com/talks/neil_harbisson_i_listen_to_color?language=es
- Hayles, N. K. *How We Became Posthuman*. (Virtual Bodies in Cybernetics, Literature, and Informatics.) Chicago & London: The University of Chicago Press, 1999
- Huxley, J. *Transhumanism*. In *New Bottles for New Wine*. London: Chatto & Windus, 1957.
- Kirtchev, C. *A Cyberpunk Manifesto*. 1997. Retrieved from: http://project.cyberpunk.ru/idb/cyberpunk_manifesto.html
- Pepperell, R. *The Posthuman Condition. Consciousness Beyond the Brain*. Bristol: Intellect Books, 2013

- Piercy, Marge. *He, She and It*. Fawcett, 1991 [Electronic]
- Murphy, G. J., Vint, S. *Beyond Cyberpunk: New Critical Perspectives*. New York: Routledge, 2010
- Roberts, A. *Science Fiction*. New York: Routledge, 2006
- Roberts, A. *The History of Science Fiction (Palgrave Histories of Literature)*. Palgrave Macmillan UK, 2006. [Electronic Version]
- Roden, D. *Posthuman Life (Philosophy at the Edge of the Human)*. Routledge: Abingdon, 2015
- Schneider, E. *Cyberpunk as a Science Fiction Genre*. 2004. Retrieved from: <http://project.cyberpunk.ru/idb/scifi.html>
- Searle, J. *Minds, Brains, and Computers*. The Behavioral and Brain Sciences: Volume 3, pp. 349-355
- Stableford, B. *Science Fact and Science Fiction: An Encyclopedia*. New York: Routledge, 2006
- Thomas, P. L. *Science Fiction and Speculative Fiction: Challenging Genres*. Rotterdam: Sense Publishers, 2013
- Welsch, W. *Mapping Trans- and Posthumanism as Fields of Discourse*. Keynote presentation at the International Conference "Mapping Trans- and Posthumanism as Fields of Discourses", Seoul, Ewha Womans University. May 28, 2014