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**PLANTING SEEDS OF HOPE: A SURVEY OF
SOLARPUNK FUTURES**

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APPROVAL PAGE



DECLARATION

I hereby declare that this master's thesis titled as "Planting Seeds of Hope: A Survey of Solarpunk Futures" has been written by myself in accordance with the academic rules and ethical conduct. I also declare that all materials benefited in this thesis consist of the mentioned resources in the reference list. I verify all these with my honour.

Date 17/07/2022

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ABSTRACT
Master's Thesis
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Since its inception, science fiction has been dominated by white male writers. Therefore, components of the patriarchal thought system such as dualist, discriminatory, and hierarchical elements have been dominant and preventing it from reaching its full potential. The genre not only developed difficult-to-break schemes, but also it gradually took on a dystopian form and began to destroy hopes for the future. So, many countercultural movements both in real life and in literature, such as ecofeminism and the New Wave movement have begun to respond to this situation. Although the impact of their resistance could not last long, it is resurrected in the twenty-first century eventually under the name of Solarpunk. It is a derivative of Cyberpunk and is affected by other punk subgenres. This new subgenre uses speculative narratives to find solutions to today's problems, focusing on the interdependence of environmental destruction and social inequalities. As a result, it has an ecofeminist thought in its philosophy that is not highlighted enough in academic studies and this aspect becomes increasingly dominant in each new anthology.

Throughout this analysis, the importance of Solarpunk for the well-being of the world and all living things in it will be emphasized because the subgenre recognizes that what can not be imagined can not be managed. Therefore, it directs its readers to critical thinking, instills hope, and motivates them to take action by presenting positive future visions through sensitive discourse. Selected stories from four anthologies, including the first and last anthologies, will be analyzed to understand the growing influence of ecofeminism in Solarpunk,

which uses narratives as a method of activism. Its narratives' similarities with critical utopias that emerged with the New Wave movement are shown, and it will be proved that it is the most important subgenre within the punk subgenres, allowing the true potential of science fiction to emerge.

Keywords: Solarpunk, Ecofeminism, Science Fiction, Critical Utopia, Cyberpunk, Steampunk, Dieselpunk.



ÖZET

Yüksek Lisans Tezi

Umudun Tohumlarını Ekmek: Solarpunk Geleceklerin Detaylı İncelemesi

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Başlangıç tarihinden bu yana bilim kurgu beyaz erkek yazarların egemenliği altındadır. Bu nedenle de ataerkil düşünce sisteminin dualist, ayrımcı ve hiyerarşik unsurlar gibi bileşenleri tür içerisinde giderek yaygınlaşmıştır ve türün gerçek potansiyeline ulaşmasını engellemektedir. Tür aşılması zor şemalar geliştirmekle kalmamış, aynı zamanda yavaş yavaş distopik bir forma bürünmüştür ve geleceğe dair umutları yok etmeye başlamıştır. Bu nedenle hem gerçek hayatta hem de edebiyatta ekofeminizm ve Yeni Dalga akımı gibi birçok karşı kültür hareketi bu duruma tepki vermeye başlamıştır. Direnişleri, etkisi uzun sürmese de, yirmi birinci yüzyılda Solarpunk adı altında sonunda yeniden canlanmıştır. Siberpunk'ın bir türevidir ve diğer punk alt türlerden de etkilenmiştir. Bu yeni alt tür, çevresel tahribat ve sosyal adaletsizliklerin arasındaki bağa odaklanarak günümüz sorunlarına çözüm bulmak için spekülasyon anlatıları kullanmaktadır. Bu yüzden de aslında felsefesinde, akademik çalışmalarda yeterince vurgulanmayan, ekofeminist bir yön vardır ve bu yön her yeni antolojide giderek daha baskın hale gelmektedir.

Bu analiz boyunca Solarpunk'ın Dünya ve üzerindeki tüm canlıların refahı için önemi vurgulanacaktır çünkü alt tür hayal edilemeyenini gerçekleştirelemeyeceğini kabul etmektedir. Bu nedenle de okuyucularını eleştirel düşünceye yönlendirir, onlara umut aşılar ve duyarlı söylemlerle olumlu gelecek vizyonları sunarak onları harekete geçmeleri için motive eder. Bu doğrultuda, ekofeminizmin, anlatıları bir aktivizm yöntemi olarak kullanan Solarpunk'ta artan etkisini anlamak için, ilk ve son antolojiler de dahil olmak

üzere, dört antolojiden seçilen hikayeler analiz edilecektir. Anlatılarının Yeni Dalga akımıyla ortaya çıkan eleştirel ütopyalarla benzerlikleri gösterilecek ve bilim kurgunun gerçek potansiyelinin ortaya çıkmasına izin vermesiyle, punk alt türleri içerisinde en önemli alt tür olduğu kanıtlanacaktır.

Anahtar Kelimeler: Solarpunk, Ekofeminizm, Bilim Kurgu, Eleştirel Ütopya, Siberpunk, Steampunk, Dizelpunk.



PLANTING SEEDS OF HOPE: A SURVEY OF SOLARPUNK FUTURES

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INTRODUCTION

Once humanity was fond of creating utopias, where an ideal life in an ideal place is described, but in more recent past, instead of utopias, their opposites, dystopias, which describe worst-case scenarios for humanity, have an increasingly stronger hold on the human imagination. Especially since the beginning of the twentieth century, they have become a whole lot more powerful because of the increasing human ability for self-destruction. Their hold on the human imagination has bred desperation and passive acceptance, especially in the last century. Furthermore, unlike the old dystopian narratives that were limited to fictional books, today dystopias surround us everywhere. With the advancement of technology, dystopian discourse manifests itself not only in books but also in media and visual narratives such as movies. Surrounded by dystopias and dystopian images everywhere, contemporary humanity seems to be locked in their hopelessness. However, some people never gave up hope for a brighter future for humanity and utopian thinking and felt that they should put an end to all of these narratives that depicted a bleak future lying ahead. This group of people is known as Solarpunks, and they are growing by the day.

Solarpunk is a subgenre of Cyberpunk. It emerged out of the discomfort of people who are aware both of climate change, social injustices, negative events of the present, and of the dystopian portrayals of the future. Proponents of this subgenre stress the futility of being desperate in front of these problems and of fake solutions like Green Capitalism. Its main goal is to imagine futures in which people can find creative solutions to global crises and inspire its readers to take action in the real world. Solarpunk motivates people by demonstrating the possibility of a bright future with a positive attitude, because, according to Solarpunk, *now* is the time to change the despair and denial inflicted on humanity for a long time. The name of the genre heralds the goodness ahead: solar represents hope and brightness, punk represents challenge and acting, and together they form a joyful anarchism.

Like every new movement or genre, Solarpunk emerged as both a reaction to and a combination of previous ones. Of those, Cyberpunk has been insufficient in terms of warning people, particularly about environmental destruction and inequalities. Steampunk, on the other hand, is retrofuturistic and cannot motivate

people about the future. Dieselpunk, another exemplary new subgenre that emerged in the early 2000s, is both retrofuturistic and pessimistic. Therefore, among the punk genres of sci-fi, there was none that offered a positive enough perspective until Solarpunk came along. The biggest reason for the inadequacy of these punk genres is that they continue the male-dominant language, culture, and schemes in sci-fi that have been going on for a long time. That is why they are unable to discern the problems of racism, sexism, speciesism, and global climate crisis, and realize how all of them are related to each other. For these reasons, there is a need for innovation, particularly an ecofeminist and critical perspective, in the sci-fi of the twenty-first century.

The failure in humans' response to the warnings behind catastrophic events is traceable to patriarchal patterns of thought, which define a hierarchical world of binaries of us and them. While phenomena such as epidemics, wars, and famines occurring at intervals throughout history must be taken as nature's attempts at reminding and convincing us that the path we have taken as humanity is incorrect and must be abandoned, humanity's reaction has been either to forget or ignore them. The most important point we overlook in this cycle of remembering and forgetting is the permanent and temporary harm we have done to both the world and ourselves. At the heart of this destructive and damaging attitude is the patriarchal order's philosophy, which has established entrenched and difficult-to-break patterns and norms in many areas of life. The victims of these patterns and norms are women, children, nature, animals, the disabled, the elderly, all races other than the white race, and many other groups that fall beyond the pale of patriarchal protection. Although the dominant discourse, which is based on essentialist and dualist thinking, refers to these groups as minorities, they are numerically the majority of the world population. That is why patriarchy must exert control over them, employing a suppressive strategy. Violence and intimidation are the most effective tools for implementing this policy.

In sci-fi, this politics manifests itself with themes such as the white male hero who saves the world, the "Inevitable Final" and migration to space. In sci-fi narratives in which these themes are predominantly used, the victims are again the groups shown as minorities. Aside from that, nature's role in human life has been reduced to that of a resource to be exploited and an obstacle to be overcome. In this way, because of the brutal exploitation, nature's self-renewal feature and generosity were ignored, and the

“Inevitable Final” discourse became dominant. It is argued by the supporters of this discourse that nature is a closed system and the Earth will die eventually. Unless an astronomical event occurs, nature, on the contrary, is a sustainable and renewable system when natural energies, particularly solar energy, are used correctly. Also, the idea of destroying our planet and then moving to another is unrealistic and impossible in many ways. First and foremost, the nearest habitable exoplanet is Proxima b, which is four light-years away. Moreover, these unrealistic scenarios such as migration to Mars are extensions of the colonial mindset. This is an escapist mindset. Before thinking about these extraterrestrial journeys, humanity needs to focus on changing its mentality. Because unless we change our expansionist and colonialist, power and ambition-driven mentality that harms our environment, humanity will destroy everywhere it goes, even if it develops adequate technology. We should not waste our time, energy, and resources on such illusional migration narratives, for what is needed is embracing and rebuilding, not destruction and escape.

First and foremost, people should stop building spaceships. Humanity has already one called Earth. It is not unreasonable to think of the Earth as a spaceship, because the planet moves every second around the Sun, around itself, and within the Universe. Life support units on this flawless ship are too complex to be constructed by humans. The spaceship form imagined in sci-fi narratives is typically a cold and metal vehicle in phallic shape that can only contain certain people and species. It lacks natural diversity, such as plants and animals, and the human species’ diversity is often limited to whites. It also can only accommodate the necessary living conditions for a human being for a limited time. However, in reality, Earth as the true form of spaceship is round, and it allows countless species to exist with its long-term life-supporting units such as the Sun. In other words, in this spaceship we call Earth we are already favored with renewability, sustainability, circularity, egalitarianism, and respect, the most essential means for our coexistence. Any other artificial spaceship outside the Earth lacks these natural values and tries to distance its passengers from these values, just as it drives them away from Earth. Then, what must be done is to bring these forgotten values, often forgotten behind greed and competitiveness, back to light while we still have a chance to undo and stop the damage we have done. In this direction, first, we need awareness, then questioning, creative thinking, and a positive perspective. In this

way, we can change the situation by ceasing to harm both ourselves and the world. Solarpunk, as a sci-fi narrative, meets exactly this need. By encouraging people to change both themselves and their surroundings, it conveys the same message as Mahatma Gandhi: “Be the change you want to see in the world.” Its goal is to inspire people to achieve success by giving them a chance to dream because it is hopes and dreams that drive people to take action.

Based on such premises Solarpunk is a brand new movement. It became widely known with the publication of the first Solarpunk anthology, *Solarpunk - Histórias ecológicas e fantásticas em um mundo sustentável* (2014), and especially its translation into English as *Solarpunk: Ecological and Fantastical Stories in a Sustainable World* in 2018. When the first work was examined by both readers and academics, it was determined that the anthology was a transitional work from Cyberpunk to Solarpunk because of the gothic and noir elements. It was written as a criticism of politics and norms such as Green Capitalism and Greenwashing, so authors often resorted to using elements of Cyberpunk like violence and death. The dominant colors on the cover of the anthology, blue, green, white, and silver, also look back on the classic sci-fi colors, white and silver, which are associated with masculinity and sterility, this time only being literally “washed” with greens. Even though there are solar panels and wind turbines it can be understood the capitalist mentality still has not changed. As the stories are read, this visual reading is reinforced, and it becomes clear at what cost all these supposedly renewable energy technologies are offered, and what commercial motives lie behind them. What is lacking here is a feminist and egalitarian perspective; without it, environmentalist thought will be in the service of capitalist and patriarchal thinking. However, as new anthologies continue to be written and the diversity of authors increases, the genre has been developing an increasingly positive outlook enriched by all of the genre-defining elements in the *Solarpunk Manifesto*, especially its ecofeminist philosophy. The last anthology *Multispecies Cities: Solarpunk Urban Futures* (2021) from its cover to its short stories, shows the development in the genre towards a more egalitarian understanding that involves an ecofeminist outlook. Its cover has bright colors, a dark-skinned girl, an Art Nouveau aesthetic that blends nature and architecture harmoniously, different species living together, and renewable energy technologies. In the introduction, editors note that Solarpunk keeps resisting

dystopian narratives by “seeking ways of practicing solidarity, embracing human ingenuity from traditional ecological knowledge to scientific research, celebrating diverse forms of being in the world, from personal expression to relationships” (Rupprecht et al., 2021). In order to accomplish this, the new anthology includes a variety of perspectives and elements, including animals, which were lacking in previous anthologies. Authors recognize the interdependence between humans and other life forms. These short stories also call into question urban greenwashing by constructing true “living” cities that incorporate beneficial technologies and respect for all species. Therefore, all these futures are built upon an ecofeminist urban structure.

Since many contributing factors had existed for years, the ground was ready for the formation of this new subgenre, Solarpunk. All it took was for a group of people to stand up against destructive and negative human attitudes towards the world. Their voice had to be both versatile and diverse in many ways. Artists, engineers, writers, philosophers, academics, agriculturists, designers, and many more people who love the world united under one banner. Because what the world needs, instead of discrimination, competition, and destruction, are love, unification, and healthy growth. Contrary to popular belief, retaliating violence with violence does not work because “[r]evolution takes love” (Meyers, 2017).

Solarpunk narratives have adopted an increasingly ecofeminist philosophy and revived the critical utopias of the New Wave. The aim of this thesis, therefore, is to highlight the ecofeminist elements of Solarpunk, which are present in the philosophy but appear later explicitly in the narratives. Apart from fiction, this ecofeminist aspect has received little or no attention in academic studies. On the other hand, the parallels between Solarpunk and critical utopias have never been noted, too. Addressing these parallels will make it easier to identify the underlying ecofeminism within the subgenre.

In keeping with this awareness, four books from Solarpunk anthologies will be examined in the thesis with an ecofeminist emphasis. These books are as follows: *Solarpunk: Ecological and Fantastical Stories in a Sustainable World* (2018), *Sunvault: Stories of Solarpunk and Eco-speculation* (2017), *Glass and Gardens: Solarpunk Summers* (2018), and *Multispecies Cities: Solarpunk Urban Futures*

(2021). Before delving into the anthologies' short stories, the first chapter will provide a brief history of sci-fi in order to make a better comparison and better understand the innovations that Solarpunk brought to the genre. In this way, it will be seen how sci-fi is built on a masculine language and philosophy, and how this situation creates schemes and patterns that are difficult to break. Again in the same chapter, the place of minority groups in classical sci-fi, which Solarpunk puts at the center by making them protagonists, will be mentioned. Then, by discussing dystopia, utopia, and critical utopias, how Solarpunk is reviving the critical utopia genre will be examined. Finally, ecofeminism and its impact on sci-fi will be discussed in order to lay the groundwork for ecofeminist readings in the following chapters.

In the second chapter, before comparing the Solarpunk stories amongst themselves, the Solarpunk genre will be compared to other punk genres such as Cyberpunk, Steampunk, and Dieselpunk. In this way, the aspects the previous genres are found lacking in solving today's problems will be evaluated. With this chapter, it will be understood more clearly how Solarpunk was born both as a reaction to the other punk genres in sci-fi and as their brainchild continuing their unfinished project. Also in this chapter, Solarpunk's development process, philosophy, and application in the field of literature will be examined and introduced in more detail. The name Solarpunk will be analyzed from both a mythological and feminist perspective.

In the third and last chapter anthologies and selected short stories will be compared and analyzed with an emphasis on the common themes of Solarpunk and ecofeminism. The main focus will be on ecofeminism throughout the chapter, although at some points it will focus on the Cyberpunk heritage to show the transition and development of the subgenre. Thus, this thesis is intended to get across to its readers the importance of this new movement and the subgenre and remind them that there is still a chance to fix what we have done.

CHAPTER ONE

SCIENCE FICTION AND ECOFEMINISM

1.1. A BRIEF HISTORY OF SCIENCE FICTION

There are numerous definitions for sci-fi offered by authors and critics. According to Isaac Asimov sci-fi is a “branch of literature which deals with the reaction of human beings to changes in science and technology” (1981: 76). Whereas, the critic Adam Roberts interprets the genre as “a form of cultural discourse (primarily literary, but latterly increasingly cinematic, televisual, comic book and gaming) that involves a worldview differentiated in one way or another from the actual world in which its reader live” (2006: 2). However, one of the most widely accepted of these definitions belongs to Darko Suvin. By defining the genre as “literature of cognitive estrangement,” he helps readers better understand the genre’s dynamics. Cognitive estrangement can be explained as a sense of unfamiliarity in the field of knowledge, which can create a critical point of view about the present by something called “novum” (Suvin, 1979: 65-6), which appears in the text and creates a distinction between the real and fictional worlds. “This novum might be something material, such as a spaceship... or it might be something conceptual, such as a new conception of gender or consciousness” (Roberts, 2006: 1). As a result, sci-fi pushes its readers to question their existing position and encourages them to think beyond the box by providing something new or unusual.

Just as there is no agreement on the definition of this literary genre, there are differing perspectives on the genre’s origins, as well. Some attribute the genre’s origins to Ancient Greece, while others attribute it to the Industrial Revolution. Rather than considering these periods to be a starting point, it would be more accurate to consider them as significant steps in the evolution of the genre. If one prefers to go chronologically, fantastic voyages of Ancient Greek literature are important narratives in the history of sci-fi. According to Roberts, these voyage narratives became a base for the travel theme in both space and time in sci-fi¹. According to Roberts, after

¹ Along with another significant theme technology, Roberts divides the genre into three themes or forms: “stories of travel through space (to other worlds, planets, stars), stories of travel through time (into the past or into the future) and stories of imaginary technologies (machinery, robots, computers, cyborgs

Ancient Greeks, the next step in the evolution of the genre is Protestants and their conflict with Catholics. The Ptolemaic system was dominant among Catholics, and they did not want or accept any other alternative because it would challenge the authority of the Church it received from God at the center of and above all things. However, Protestants were against this restrictive system and foreseen an expanding or open system. Their vision of expansion was “the science fiction imagination” that move the genre into its next step (Roberts, 2006: x). The claim that the Sun, not the Earth, is the center of the cosmos caused a division in the prevalent thought system. People began to ponder profoundly about the universe’s potential, such as aliens or the interesting nature of the cosmos and time. Therefore, the discourse of sci-fi, which had been mostly magical, turned into a non-magical one (Roberts, 2009: 3). However, it must be recognized that their influence on sci-fi is not completely positive. The WASP values became dominant in the genre, and its hegemony created certain schemes that are difficult to break, such as white and young, heroic male protagonists. Still, the impact of their vision of expansion, later supported by the Copernican Revolution in the sixteenth century, cannot be underestimated.

The Industrial Revolution is the next important step. It introduced and popularized technology. A prolific era began after the Revolution; therefore, this period can be considered a second milestone in the genre. Two different authors from two different continents are among the most important authors of this period: Mary Shelley and Edgar Allan Poe. While Shelley, by creatively merging themes of aliens and technology, was criticizing her own time and society in *Frankenstein* (1818), Poe experimented with notions of time travel and space. He also analyzed humans’ reactions to these new concepts in his narratives such as *The Unparalleled Adventures of One Hans Pfaal* (1835). He was appreciated for his use of scientific details to create verisimilitude, and this technique was later used by famous authors such as Jules Verne. Even though both Shelley and Poe have their unique styles and contributions to the genre, there are still debates about which one of them is the true founder of modern sci-fi.

and cyber-culture)” (Roberts, 2006: viii). Later he adds Utopian Fiction as the fourth form which is also important for this thesis and be discussed in detail in the next title.

In the nineteenth century, technology became a common reality of everyday life. Thus sci-fi authors of this period had their interpretations of technology either as a militaristic force capable of transforming humans into machines or as a positive aspect of life that contains a certain kind of mysticism in its fascinating mechanism. While the voyage and exploration stories continued to be written during this stage, two important writers were on the rise in their careers: H.G. Wells and Jules Verne. Especially Verne, in the 1880s, became a huge inspiration for the new subgenre, Steampunk. His style, according to Roberts (2009: 17), is a combination of the following: “an educational and fast-paced adventure tale heavily flavored with scientific didacticism, mixing equal parts of drama, humor, and ‘sense of wonder,’ and seasoned with a large pinch of positivistic Saint-Simonian ideology.”

As previously stated, the period following the Industrial Revolution is prolific in terms of not only sci-fi but also science itself. With the publication of Darwin’s *On The Origin of Species* (1859), stories of encounter with extraterrestrials and alien life forms also became popular. At the end of the nineteenth century, the sci-fi met H.G. Wells and his narrative. In two significant ways, he was different from Verne. First, his narrative did not intend to be didactic, and second, his use of scientific knowledge in his narratives was motivated by the desire to create an emotional impact on his readers. Because the period was also marked by xenophobia and racism, it is no coincidence that one of his best-known narratives, *The War of the Worlds* (1897), was published during this period. His Martians are the representations of invasive Other and can be interpreted as “the prototype of all the cyborgs” (Rieder, 2009: 25).

Even though the nineteenth century has a significant period in the development of the genre, it could not be called science fiction until the Pulp Era, which takes its name from American pulp magazines and narratives. The term science fiction became popular thanks to Hugo Gernsback, who is the publisher and editor of the first sci-fi magazine *Amazing Stories*². Although he lost his control over the magazine in 1929 because of bankruptcy, he continued to influence sci-fi until the early 1950s. The Hugo Award, named after him, is one of his most visible contributions to the genre.

² *Amazing Stories* was first published in 1926. This magazine, which has a very long printing and publication history has been available as an online website since 2012.

Before analyzing his influence on the genre, the period's cultural and social dynamics have to be understood. The early twentieth century was divided into two groups. The conflict between modernism and popular culture shaped the period's dynamics and discourse. Their conflict was mainly because of the divergence of opinion on technology that began in the nineteenth century. On the one hand, especially High Modernists were against technological developments by discussing how machines were estranging people from their natural state and how they are losing their "contact with the organic, non-technological and spiritual" (Roberts, 2006: 158). On the other hand, popular culture was celebrating technology. The dominant one, of course, was popular culture. Therefore, thanks to popular culture's enthusiasm for technology and scientific developments, the Pulp Era of sci-fi, from the 1920s to the 1930s, created another deep-rooted scheme in the genre that is difficult to break. In general, characters were tough and have strong ethical codes about good and evil. The locations were mostly "exotic and wonderful locales" (Roberts, 2006: 176). While narratives were developing according to this scheme, Gernsback was contributing to the genre's critical side. According to Mendlesohn (2009: 54), paving the way for the creation of "fandom" through organizing meetings with readers and authors, Gernsback is the founder of the parameters that are used in the genre's critical debates. In these meetings, the ideology and the language of sci-fi were shaped.

The Pulp Era is followed by The Golden Age, which covers the period between the late 1930s and the late 1940s. The narratives' common feature is that they are classified as Hard Sci-Fi. The authors were mostly white males and their narrative was linear. In general, there were "heroes solving problems or countering threats in a space-opera or a technological-adventure idiom" (Roberts, 2006: 195). It was an age of masculine dream, optimism, and idealism where "the technological manifestation of the Will of the (masculine) hero/reader" is evident (Roberts, 2006: 208). Sci-fi had to be "hard" in such a male-dominated era, which means the narratives had to seem as accurate as possible (especially in terms of scientific and technological knowledge). The main focus is on natural sciences such as physics, math, computer, engineering, biology, chemistry, and so on. There is no room for fantasy elements; therefore, this period is probably the highest in terms of gender and racial discrimination in sci-fi. It is an area only for male authors where their fantasies come true. The words chosen to

describe this period are “Golden” and “Hard”; the former is a manifestation of the period’s perfection for males, while the latter has a connection with male physiology and mentality.

After the 1950s, which is a transition period, New Wave emerged during the 1960s and continued to influence both authors and readers in the 1970s. It was a period of experimentation in response to the Pulp Era. The narratives of this era are called Soft Sci-Fi. Soft narratives, in contrast to Hard Sci-Fi, were based on social sciences such as history, politics, psychology, philosophy, sociology, and so on. They do not seek scientific and technological accuracy, which means there is always room for imagination and fantasy. This flexibility is the key that enables authors to challenge their current systems. Artistic sensibility, stylistic experimentations, and reaction against traditional schemes in sci-fi with an avant-garde attitude shaped the period’s narratives and made them radical. However, the most important aspect of the New Wave was the diversity of authors who wrote about the issues of gender, environment, and race. Therefore, Solarpunk owes a lot to this period in terms of content and style. Political turmoils, drug subculture, postmodernism, sexual liberation, the Civil Rights Movement, environmental movements, and the critical perspective of the 1960s and 1970s influenced New Wave authors such as Ursula K. Le Guin and Alice Bradley Sheldon (also known as James Tiptree, Jr.). The number of women authors increased and they challenged the white male hegemony both in real life and in their fiction. Sci-fi authors, therefore, helped many excluded groups by creating alternative realities. In this way, they contributed to the feminist movement through sci-fi.

New Wave is not the end of the history of sci-fi. After this period new subgenres began to emerge and follow one another such as Cyberpunk. However, this evolution will be analyzed in the next chapter. Therefore, in order to continue building a foundation for Solarpunk, especially after New Wave, it is necessary to discuss the place of issues such as race, gender, sexuality, and disability in sci-fi history.

As mentioned before, from the beginning sci-fi was under the hegemony of certain white male schemes. One of the main reasons for this is the lack of both female and queer authors. Even though sci-fi is a “fertile environment for the exploration of sociocultural understanding of gender,” it has been regarded as a genre of and for males because of its strong connection with science and technology (Merrick, 2003: 241).

This essentialist and dualist view limited the potential of the genre by categorically rejecting the perspectives and experiences of females and queers. Women generally appeared in the texts as alien creatures which are the manifestation of the fear of Other or hypersexualized prizes of heroes. Therefore, the dominant dichotomies in culture such as organic/inorganic, human/alien, and nature/culture or nature/technology have been continued through these images. However, sci-fi is a genre that reimagines the current dynamics such as culture, society, humanity, governments, and so on. Thus, the authors who want to challenge dominant schemes in the genre, reimagine gender issues in terms of androgyny by “merging the binary into a singular ‘gender’ (the hermaphrodite); collapsing the binary by refusing gender categorization altogether; or positing a multiplicity of genders which subverts dualistic oppositions” (Merrick, 2003: 242). For example, in *The Left Hand of Darkness* (1969), Le Guin deconstructs the notion of gender by using gender-neutral pronouns and using hermaphrodite characters.

In addition, the contribution of female authors to the genre brought a fresh point of view about the world. They created new utopias and dystopias. Especially feminist utopias of the sixties and seventies have been highly influential. They are critical; therefore, they do not offer perfect, enclosed, and sterile places and systems as old utopias did. They not only challenged gender norms but also hierarchal structures from governments to nuclear families. In their alternative future societies they “promote freedom of sexual expression, including homosexuality, in order to ‘separate sexuality from questions of ownership, reproduction, and social structure’” (Merrick, 2003: 248). From these perspectives, it is undeniable that the dynamics of sci-fi changed with the inclusion of female authors. Protagonists are no longer white males, and the fetishization of technology during the Pulp Era does not have a place in these narratives. Social issues became more important than scientific ones. Women’s impact will be better discussed under the title “Ecofeminist Science Fiction,” and it will be seen how their perspective has radically and irreversibly changed sci-fi.

Queers, like female authors and readers, also bring a variety of perspectives to sci-fi, despite the fact that their viewpoint has been overlooked for as long as women’s. One of the major issues in sci-fi narratives is the lack of queer identities, both as authors and as characters. Attempts to create racially alternative futures have been

common, but there has not been enough effort to create alternative futures based on different sexualities. Pearson (2003: 149) emphasizes that while the number of gay, lesbian and bisexual authors is increasing in sci-fi, it is still uncommon to see queer protagonists whose creators are not queer themselves. This demonstrates how queer issues continue to be a concern only for queer people and how mainstream sci-fi continues to reject both their existence and their struggles. This situation is also at odds with the nature of sci-fi authorship, whose primary task is to consider various possibilities and imagine alternatives.

The nineteenth century, as Pearson points out, was a time when all sexual orientations were primarily depicted through the heterosexual and homosexual binary in most of the fields, including sci-fi:

The categorization of homosexuals as a species of person who were sick, perverted or criminal has had effects which have lasted well into the twenty-first century. Portrayals of homosexuals and bisexuals in sf during this period have unsurprisingly tended to reflect societal attitudes towards sexual dissidence.
(Pearson, 2003: 153)

Sci-fi provides a perfect tool to deconstruct these portrayals because putting into writing/language what we imagine alters and affects the reality we live in. Therefore, using different pronouns, definitions, and descriptions can disrupt dominant cultural norms about gender and sexuality. According to Pearson (2003: 157) “sf which describes bodies, genders, sexualities as fluid is much more in harmony with approaches that celebrate fluidity, liminality and other radical tactics for deconstructing the rigidity of binary identity categories” such as queer theory itself.

In conclusion, if the Age of Enlightenment and the Industrial Revolution are considered milestones in the history of sci-fi, the New Wave and the increase in the diversity of authors is another. Both queers and women have much to add to this literary genre. Their struggles and responses are similar in both real life and sci-fi narratives. The challenging nature of their texts can still be found in new subgenres like Solarpunk.

However, unless all excluded groups are represented in a literary genre or a political movement, an incomplete assessment is made. Obviously, women and queers are not the only outcasts. People from different races, ethnicities, and even disabled

people should have a voice in the genre. Therefore, before a detailed analysis of Solarpunk stories, it is necessary to mention these groups and their place in sci-fi.

Racism in sci-fi was discussed or analyzed in detail for a long time. The majority of the sci-fi writers were not only males but also whites because like women, gays, and lesbians, people from different races and ethnic groups are not only excluded from the genre but also from other literary genres and art forms. Their works are not considered sci-fi because they do not contain enough scientific elements. As Leonard (2003: 253) indicates, even though writers from different races produce works in the United States that can be classified as sci-fi and fantasy, their works are published only under the category of African-American, Mexican, or Native American literature, not sci-fi. In other words, what they produce has been categorized according to their racial identity; therefore, their works are only evaluated as texts to be analyzed in racial and ethnic studies. Furthermore, the magical elements in these fictions that come from their culture—as opposed to the technological details that mark white male sci-fi—do not count as a part of speculative fiction.

While non-white authors have been ignored in this manner, the portrayal of any non-white characters is also problematic. As Leonard (2003: 254) points out, “in many books, the characters’ race is either not mentioned and probably assumed to be white or, if mentioned, is irrelevant to the events of the story and functions only as an additional descriptor, such as hair colour or height.” They are just empty stereotypes without a cultural and historical background. The main reason for this is that these people were not regarded as individuals or as human beings. Non-white people, such as Africans, are depicted as aliens in these mostly white-male-written fictions. (It should be remembered the same depiction is also used for women and queers). Isiah Lavender follows a path that analyzes this racist attitude through the United States and its citizens; therefore, he associates this situation with Americans’ obsession with other races and their fragile sense of self-identity. The United States is not a blood-tied nation with a shared history and culture, but rather a nation of ideas. In their creation, there is no solid ground. As a result, there has always been a pervasive fear of disintegration.

The racist attitude in sci-fi narratives can manifest itself through the use of cyborgs and post-human creatures as racial metaphors. Aliens, which are the

representations of non-whites, are mostly portrayed as strange, scary beings or sometimes even primitive creatures. This type of representation of any race has negative connotations. However, on the other hand, cyborgs and post-human creatures can appear as a challenge to not only racism but also any other discriminative attitude. By blurring the lines between what is human and not human, cyborgs and other post-human creatures appear as new races (Lavender: 2011, 27). As a result, sci-fi, as a genre of cognitive estrangement, makes its readers question racism through novum such as cyborgs.

According to Lavender, in order to better understand the dynamics of racism in sci-fi, one should consider Social Darwinism and its consequences. Technology, race, and power are important norms while analyzing racism in both science as a field and sci-fi as a genre. White males used and mastered science to prove their superiority and excluded any other participants from it. Therefore, they considered themselves smarter than other sexes, races, and animals. Along with the fact that a small minority held power through scientific superiority, the interpretation and adaptation of Darwin's theory of evolution as a social theory of evolution doubled this disequilibrium of power. The result called Social Darwinism emerged in the late 1800s, in which Darwin's rule of natural selection began to be used to legitimate certain social, political, and economic concepts. People in positions of power used the logic of "survival of the fittest" to explain why a certain minority managed to have better lives and achieve success. Later, as a result of Social Darwinism, imperialism, eugenics, racism, and social inequalities became major global issues that needed to be addressed.

In sf, social Darwinism is certainly a master narrative when considering the subject of race. Social Darwinism creates binary systems that divide humanity, and we as a species cannot seem to cross such divisions as inferior/superior, self/other, us/them, or, in particular, the black/white binary. (Lavender, 2011: 42)

It is because of these binaries that certain races have been accepted as being incapable of achieving success in science. The role of Social Darwinism in sci-fi, therefore, can be better understood only by the awareness of the following: sci-fi with or without the intention of teaching, informs its readers about scientific facts, and sci-fi narratives inevitably reflect the society's dynamics through its discourse. Thus, by

both being a tool of Social Darwinism because of the authors and introducing it to a large number of readers, sci-fi can easily become a propagator of this theory. However, this situation creates a paradox within the genre. At this point, it is clear that in order to resolve this paradox, the discriminatory and hierarchically based dynamics of science must be broken. While this literary genre serves to question the current system with the imagination and expression of new possibilities and alternatives, at the same time it continues to be limited by the authors influenced by such dynamics in science. Therefore, “sf as a cultural production, ... supports racism as a system (and perhaps postracial moments too) in its near and far-flung histories and visions of the future” (Lavender, 2011: 52-3). In order to heal the racist tendencies in sci-fi, movements and subgenres such as Afrofuturism, Steamfunk, Chicanafuturism, and Solarpunk are trying to resolve this paradox.

Lastly, the representations of disability and disabled people in sci-fi make up a new recent debate. Even though disability had been a subject for medical and clinical studies for a long time, it did not have a place in humanities until the Disability Civil Rights Movement of the twentieth century. In contrast to medical and clinical studies, which focus on physical and mental impairments in individual bodies, disability studies as an academic discipline examine disability as a social construct (Mullaney, 2019). Disability is evaluated as “a culturally fabricated narrative of the body, similar to what we understand as the fictions of race and gender” (Garland-Thomson, 2002: 5). This type of narrative creates discrimination through body images. In general, people are fond of thinking of the body as a homogeneous whole and any distortion to this integrity is not welcomed. Therefore, disabled people are excluded from society because, as Garland-Thomson claims, “they call into question our cultural fantasy of the body as a neutral, compliant instrument of some transcendent will” (2002: 5). This cultural fantasy is a male fantasy because women are more accustomed to changes in the body as in the cycles of menstruation, pregnancy, and lactation. Essentially, however, no body is static, for it goes through many different stages from birth to death. Furthermore, because we are living beings, no one is “pure” or “sterile,” so continuing the obsession with the idea of a “pure, hard, sterile, and homogeneous body” that, in America mainly results from Puritanism, is futile. Furthermore, when the body, which is an organic structure, is identified with the aforementioned

adjectives, the body loses its organicity and value, and turns into a machine. In this case, any bodily problem, from the loss of a limb to any situation involving the nervous system, is viewed as a “defect” to be “fixed”. The only important point, as a result of this discourse attributed to the body, is that the machine body, which is seen as an important wheel in the system’s functioning, remains useful and continues to serve the system.

Disability and subjects about the bodies have been always a part of sci-fi. *Frankenstein* (1818) is probably one of the best examples of such narratives. However, as Kathryn Allan (2013: 2) points out, although “SF is inhabited by people (and aliens) whose embodiments are situated along the entire spectrum of ability” and there are numerous representations of disabled people, there is a significant gap in the critical side of it. She realizes that the paradoxical situation in classic sci-fi narratives about racism and sexism also exists in the disability issue. In other words, by failing to create cognitive estrangement through novum, in this case by not including alternative body images into the narratives, it succumbs to and perpetuates society’s prevailing patterns about disability.

While examining the place of disabled individuals in the genre, it would be correct to include the elderly in this group, as well because in the current hegemony and discourse, just like other people with disabilities, the elderly have been pushed aside as useless and unprofitable part of society. Their experiences and wisdom are neglected. Thus, ageism and disability become parts of social injustice, an important subject in Solarpunk.

Sci-fi offers a large spectrum of representations of body types, and this has a liberating effect on the current thought system. Recent developments in genetic engineering, adaptations to different environments, or being connected to cyberspace transform the representations of the body images in sci-fi. Yet, disabled people are still mostly seen not as one of these different ways of perceiving and experiencing the world but as a problem to be fixed. The problem is that “whenever there is disability in a SF narrative, there is the parallel trope of ‘cure’” (Allan, 2013: 9). This cure can be cheap or expensive, necessary or arbitrary depending on the author’s perspective. Prosthetic additions and enhancements of the body; in other words, debates of post-humanism, are therefore parts of discussions on disabled bodies and sci-fi. Although

post-humanism is projected as an inevitable future of humanity, through the lens of disability studies, its premises to create the perfect body are both humiliating and misleading. Indeed, disabled people sometimes depend on technology to make their lives as easy and independent as possible. But the arbitrary changes that are made by the rich class in sci-fi stories, are nothing but ignoring the struggles of disabled people. What needs to be done is to see disabled people as individuals and a part of society rather than as “things” that need to be fixed. Therefore, sci-fi is responsible for breaking down common stereotypes about the body by offering alternatives with a supporting philosophy in the background, to fight social injustices.

According to Solarpunk, sexism, racism, and disability are important subjects that need special attention and they are interlinked with environmental destruction, which are the main subjects of its narratives. Therefore, to better understand Solarpunk, it is important to build a solid background and take a look at the history of sci-fi, the representation of minority groups within the genre, and understand what its dynamics are and who created them. So that it can be better understood how and why this new subgenre challenges the dominant schemes and patterns both in real life and in sci-fi.

1.1.1. Utopia, Dystopia, and Critical Utopia

The concepts such as utopia and dystopia are deliberately excluded from the first title and in the discussion of the historical development of sci-fi so far because they must be examined separately and in detail for Solarpunk. In every period, people have had positive or negative predictions about the future, and with the introduction of technology into human life, the number of these predictions has increased. While people are predicting the future, their visions are influenced by their current circumstances. Thus, utopias and dystopias are the projections of the present. There are numerous utopia and dystopia narratives in the history of sci-fi, but the critical utopias that emerged during the New Wave are the most important for this thesis because Solarpunk makes its predictions about the future by using this new critical lens.

Although there have been times in the history of sci-fi when utopian and dystopian narratives have coexisted, historically, utopias existed before dystopias. Furthermore, as Roberts clarifies, despite being a subgenre of sci-fi, utopia has roots in fields such as “philosophy and social theory,” demonstrating how old the genre is (2006: viii). According to Suvin utopia is:

...a verbal construction of a particular quasi-human community where sociopolitical institutions, norms and individual relationships are organized according to a more perfect principle than in the author's community, this construction being based on estrangement arising out of an alternative historical hypothesis. (1979: 49)

However, such construction can be problematic because the word utopia is derived from the words *outopia* and *eutopia*, which mean both no place and good place. This “no place” is inhabited by a non-existent society, which also serves as a novum. Even though the word itself appears first in Thomas More’s work *Utopia* (1516), its origins can be traced back to ancient times. The image of utopia and paradise, where one can leave all difficulties and agony behind, can be found in ancient Greek and Roman texts as well as the Bible. The wish and hope for a better place lie in people’s unfulfilled needs and desires. Moylan clarifies that “the literary utopia developed as a narrative form in times of deep change, and it has continued to thrive in tumultuous moments since the sixteenth century” (2014: 3). In this way, the authors criticize the current system by imagining a new and alternate world that is both perfect and hidden. Furthermore, the idea of these perfect and hidden lands on earth has inspired many people throughout history and led to numerous discoveries, such as the discovery of the Americas and the founding of the United States.

Some major utopian narratives worth referring to here include *The City of the Sun* (1602) by Tommaso Campanella, whose egalitarian society was a challenge to the social order of the Middle Ages. In this city, the Earth is considered as a mother while the Sun is a father. The circular structure of the city, an egalitarian view, respect for Nature, an equal division of labor, and the value given to art and science are the revolutionary aspects of the city. Carolyn Merchant, a leading ecofeminist critic, summarizes the significant aspects of utopias like *The City of the Sun* as follows:

...all parts of the natural and social community were interrelated in an organic unity in which both human and natural components were of equal value in the functioning of the whole. The whole organism was greater than the sum of the individual parts; the collective good was greater than the advancement of any one part over the others. Change came from within the community rather than as a directive from without and was determined by the needs of the entire human-nature system. (Merchant, 1983: 95)

Utopias such as *The City of the Sun* demonstrate that, as in Solarpunk, notions of equality and living in harmony with nature have always been at the heart of the desire to create better places. The majority of utopias that envision a new and alternative social order are based on elements and ideals such as communal life and activities, harmony, peace, elimination of money, violence, property, and so on. However, utopias have several flaws that must be addressed, as well.

In the literary field, it is necessary to divide the historical development of utopia into two parts. Utopias from before the twentieth century can be classified as old, whereas those from after the twentieth century can be classified as new and even critical. Old ones, just as new utopias, have the hidden potential of turning into tyranny. Every narrative is influenced by the perspective of the author. This perspective may be religious, political, or philosophical. Some utopian narratives are likely to include “Catholic, Protestant, or socialist” elements in this case (James, 2003: 220). *Utopia* (1516), which can be classified as an old utopia, in this case, has Catholic features because of its author Thomas More. As a result, unlike Protestant ones, this utopia’s and any other Catholic one’s structure is more closed, static, and stagnant. Their “perfect” societies can easily turn into oppressive ones by destroying the individual and creating power imbalances. For example, such utopias have no mobility. Citizens of these secret and perfect places do not travel or explore outside of their utopian place. The reason for this can be obstacles such as the necessity of having a license to travel. Only an outside visitor appears in More’s and Campanella’s stories. These outside visitors simply learn about the place and compare it to the society from which they came. They do not contribute to this new social order rather they are blended into it. This phenomenon of being blended into society can also mean being erased in that society over time. The reason for this is that people who live in utopias typically live in oppressive societies and are at risk of losing their freedom over time due to the

impossibility of preventing a certain group's desire to take over the dominance, as Edwards explains in his article (2003: 220).

Another problem with such narratives is their superficiality. Poor characterizations and plot developments support the static nature of utopia, as well. The main issues are that the characters lack enough depth to be considered individuals, and there is no emphasis on diversity in society in this case. The plot is always based on the same schemes and patterns. Throughout the narrative, neither the characters nor the utopian realm undergoes any significant changes. There is no notable conflict. Although these narratives attempt to create a different order than their current one, they are inevitably influenced by it and are unable to provide sufficient critical perspective. Therefore; the desired development and progress can not be achieved. Thus, it is understood that the ideal world that is created in utopian narratives does not always mean a better world. However, despite these flaws, utopian narratives have survived because the hopeful future scheme they promised has always been admired and loved by people.

In the late nineteenth century, just before turning into critical utopias, the old utopias transformed. The debate between modernists and advocates of popular culture that resulted from the rapid development and spread of technology during the preceding century influenced utopian narratives. High Modernists' fears of being alienated by technology and popular culture's reliance on it eventually make the distinction between utopian and dystopian narratives clear, and perhaps the most significant impact of this conflict is that it has transformed sci-fi into its most distinguishing feature, futuristic fiction. Because the primary topic of discussion between these two groups was what kind of future the new technologies would provide them.

Looking Backward (1888) is one of the most influential of these futuristic utopian fictions. By projecting a better state into the future rather than the present, the logic of utopia shifted from something ready and waiting to be discovered to a process that must be worked towards. People understood that a "revolutionary and historical change" was needed and they had to take action; therefore, "farmers, industrial workers, women, racial and ethnic minorities, intellectuals, feminists, socialists, communists, anarchists, syndicalists, populists, free love and temperance advocates,

spiritualists, and many others shared a general rejection of the dominant system” (Moylan, 2014: 6).

However, with the twentieth century, the flame of this positive perspective that motivates society began to fade slowly. Until then, personal, political, and economic problems were not strong enough to destroy the belief in humanity and the future. As a result, it is accepted that the “dystopian narrative is largely the product of the terrors of the twentieth century” (Moylan, 2000: xi). WWI, WWII, the emergence of dictators such as Stalin and Hitler, atomic bombs, economic crisis, extreme violence, famine, genocide, ecocide, and many other things led people to question the essence of humanity and created doubts about the future of the world. World wars, in particular, are the breaking points, that, according to Graham J. Murphy, accelerated and facilitated the rise of dystopias (2009: 474). Humanity began to see how their greed and ego, combined with their inventions and machines, can destroy them. However, Moylan claims the roots of dystopia go back even before the First World War. Menippean satires from Greek literature and later Realism had already laid the groundwork and discourse for the dystopian narrative to emerge (Moylan, 2000: xi).

Writers create dystopian futures by projecting their anxieties and criticisms about their current situation into the future. In this way, they hope to both warn and stimulate their readers. Although prosperity and happiness sometimes appear in these fictional futures, they are no more than illusory elements; it is pressure and danger that always make themselves felt throughout. The source of this pressure and danger may be the government or big companies. The element of oppression, combined with technology, is frequently used to achieve public control. In such an order, individuals lose their freedom. In order to round out this pessimistic future prediction, environmental destruction is used to create a hopeless atmosphere.

The element of hope varies within these narratives. In some, the element of hope is completely rejected, while in others, hope may manifest itself only in connection with the figure of a savior, rather than a solution to which every individual contributes. Therefore, dystopian narratives can easily lead one to despair and denial, as they often lack creative solutions and positive critical perspectives for their readers. In addition, these narratives deny a reformist perspective, as well.

After its appearance in the early twentieth century, dystopias also affected both the Pulp Era and Hollywood. Works such as *Brave New World* (1932), *Fahrenheit 451* (1953), and *Nineteen Eighty-Four* (1949) focus on near-future dystopian themes; technosocial changes, threats, fears about overpopulation, ecological crisis, and pollution. Such an increase in dystopian representation is in fact proof that real life was also affected by dystopian thinking. Since modern society offered ordinary people few avenues to express their frustrations, they began to act in an escapist fashion and channel their unfulfilled desires to consumerism and visual consumerist places like Disneyland. All the utopian thinking and search “was reduced to the consumption of pleasurable weekends, Christmas dreams, and goods purchased weekly in the pleasure-dome shopping malls of suburbia” (Moylan, 2014:8). Like in utopia, the impact of dystopia on people did not fade quickly; in fact, it grew stronger. Especially in the 1980s and 1990s, because of the increasing consumerism and capitalism, along with the number of dystopian narratives, criticism of the existing order began to increase. Cyberpunk emerged during this period as a part of these narratives.

Dystopian narratives dominate the narratives today both in fiction and in real life expressed through media. They continue to support the discourse of the “Inevitable Final” by presenting images of polluted nature and an unjust world. Whenever people open their televisions or read a book what they encounter is just a hopeless present, a negative and aggressive language, and a ruined world order for the future. The themes of social injustice and environmental destruction depicted in these discourses are particularly important. A growing number of dystopias make their readers/audiences accustomed to these two mutually destructive elements. In fact, together with the “Inevitable Final” discourse, these descriptions lead people to a process of acceptance by pacifying them instead of pushing them to question and play an active role in healing these issues.

Some such results are certainly not intended by the authors. But, since fiction, especially sci-fi about the future (sci-fi can also be retrofuturistic), has a very strong effect on people, authors, with their criticisms and predictions, have the ability to change reality, therefore, the future. Thus, the words that are used should be chosen carefully, and the futures that are created should be supported by a solid and positive philosophy. This is why critical utopias that emerged within the sixties and seventies

are important. On the one hand, they reject the pessimistic perspective of dystopia; on the other hand, they criticize the stagnation of utopia. Leading to passivity and resistance to change, they both fall short of either showing imaginative possibilities of better social arrangements and bringing real change or providing cautionary tales of approaching catastrophes.

Sometimes activists use an offensive tone to mobilize people on the mentioned issues. Unfortunately, this method can have a negative impact on people who are surrounded by dystopias and plunged into despair. Because the discourse and method of dystopias are very similar to the discourse and method used by these activists. Both use negative imagery and harsh rhetoric to warn people. Where they fail to push humanity to take action by questioning, critical utopia fulfills this need. According to Lyman Tower Sargent, an academic who specialized in areas such as utopian studies and American studies, critical utopia can be defined as:

...non-existent society described in considerable detail and normally located in time and space that the author intended a contemporaneous reader to view as better than contemporary society but with difficult problems that the described society may or may not be able to solve and which takes a critical view of the Utopian genre. (1994: 9)

Critical utopias and especially Solarpunk's positive narratives are good choices for those who want to use art and fiction as a method of activism which is an alternative to the aggressive environmental discourses we see in media and similar fields. Solarpunk's goal is to raise awareness of current issues and offer creative solutions and a positive perspective by encouraging people to think differently about situations. Instead of presenting ready-made utopias to people, it shows the problems that will be encountered on the way to the dreamed future. Therefore, it focuses on the process rather than the result. The goal is to give readers a critical point of view and lead them to question. Because the futures created by Solarpunk writers are not perfect, we can see that global crises such as racism, inequality, and even famine are still going on in them. But in every story, there is a protest, a rebellion, and a positive point of view towards a solution to these problems. The best way to understand Solarpunk's stance on this issue is to read its manifesto, which will be referenced frequently throughout

the thesis. In the introduction of the manifesto, the character of the movement and genre is described as:

Solarpunk can be utopian, just optimistic, or concerned with the struggles en route to a better world, but never dystopian. As our world roils with calamity, we need solutions, not only warnings. Solutions to thrive without fossil fuels, to equitably manage real scarcity and share in abundance instead of supporting false scarcity and false abundance, to be kinder to each other and to the planet we share. (The Solarpunk Community, n.d.)

Even though the manifesto claims that Solarpunk can be utopian, it is actually much closer to being a critical utopia because of its critical perspective and motivating aspect.

Solarpunk's predecessors are found among the 60's critical utopian fiction that treated the issues of race, gender, class, and ecology. In the 1960s, utopias returned to the literary field as resistance and reaction to the dystopias that took a deep-rooted place in people's lives, especially from the beginning of the twentieth century. But utopia was very old in form and needed to be renewed and developed. The first utopias written in this period were feminist utopias, and the critical perspective of the feminist movement changed the dynamics of utopia, along with the successive protests and movements created by minority groups. One of the most important works is *The Dispossessed* (1974) which can fall into the category of early-Solarpunk. In these new utopias, topics such as ecology, environment, sexism, racism, and equality were emphasized, and discourse was shaped by philosophies and movements such as socialism and anarchism. Counterculture, LGBTI+, and ecofeminism had a huge effect, as well. Alternative but possible communities were built by removing or changing the undesired or destructive elements of the system such as the state, violence, and borders in these new futures. The aim was to motivate more people to challenge the system. Against the existing individualistic lifestyle, which weakens the bond between people, the need for communal life and kinship, even a "quasi-tribal," lifestyle was emphasized and envisaged (Moylan, 2000: 80). All these, along with community, kinship and cooperation are still important elements in the heiress, Solarpunk. Aware of the injustices and turmoil, the authors of Solarpunk fiction collectively take it upon themselves to call for a change, which can be achieved only

with a critical perspective. That is why critics and academics like Suvin, Sargent, and Moylan call these narratives critical utopias.

More than entertainment, other than activism, the critical utopias had and still have their place in furthering the processes of ideological critique, consciousness-raising, and social dreaming/planning that necessarily inform the practice of those who are politically committed to producing a social reality better than, and beyond, the one that currently oppresses and destroys humanity and nature. (Moylan, 2000: 82)

Therefore, Solarpunk is the revival of these critical utopias in the twenty-first century by continuing their legacy with more technology, because as the manifesto clarifies, this genre is not only an entertainment form but also a tool for activism. The aim of each solarpunk ³(just like cyberpunk/s the proponents of the movement describe themselves as solarpunk/s) is to change the world for the better by using various methods such as art, politics, science, and so on. Writers have a special place within the movement who use their words and imaginations to support this collective activism. Because as Moylan declares, dreaming and fighting for a better world through writing utopias is the most utopian action possible in the literary discourse (2014: 38).

The critical utopias of the sixties and seventies aim to effect social change. A few decades later, this aim reemerges in Solarpunk. In its manifesto, the Community states that one of the main wishes of solarpunks, just like the followers of the New Wave in the sixties and seventies, is to achieve social evolution, through love, tolerance, acceptance, and respect. It is obvious that there are yet some problems to be overcome in order to achieve this social evolution. Among these challenges, Moylan notes, are ending the male-dominated structure; reorganizing the relationship between humans and nature; eliminating the contributions of science and technology to the hierarchical structure; and ending the dominance of a single race, religion, language, and group (2014: 11). These are by no means, new problems; rather, they have been inherited by contemporary people from years before, and they still demand resolutions. That is why Solarpunk's subjects are shaped around these issues. In Solarpunk

³ Throughout the thesis, it is seen that the word Solarpunk is sometimes written in lowercase and sometimes the letter s is capitalized. When it is capitalized it denotes the movement and the literary subgenre, otherwise it denotes the movement's supporters and representatives.

narratives they appear as various imperfections in the societies of the future, just as they did before in New Wave's feminist narratives. These flaws and the problems they cause contribute to the narratives' dynamism. Through this dynamism, the static structure of old utopias has been challenged because flaws and problems show readers that there is no perfect place to escape. The problems that are criticized in any society can be found anywhere in the world, and there is no way to avoid them. In old utopias, it was common to want to leave the existing society behind without attempting to fix it and to try to get rid of it in some way. Efforts should be made, however, to correct these issues. Thus, by accepting this situation, the "utopia is a process" mentality emerged, prompting both the characters and the readers to take action.

Characters are now active subjects, not passive visitors, like More in *Utopia* (1516) or The Captain in *The City of the Sun* (1602). The critical utopias' characters are aware of the problems of the society they live in and they show their discomfort. Then, without an escapist impulse, they take action to fix these problems. This way, they become some sort of role model to the readers. The most striking feature that critical utopias and Solarpunk have in common is that these revolutionary characters are from a so-called minority group or even a non-human—not a white male savior hero—who acts as part of a collective movement rather than an isolated individual. For example, the protagonists in Solarpunk anthologies range from children to the elderly, from Africans to Indians. While queer people can take an active role in a strong anti-racism protest, a mechanical tree can develop empathy and interact with characters and readers alike. All these characters in Solarpunk's critical utopian narratives work together. Again, to give an example, protagonists can team up with other people to make their country visible on a map or they can work with plants and machines to protect their city from extreme weather, or they can collaborate with animals to catch a criminal. In other words, it is understood that people are not the only ones taking action in the critical utopias of the new century. Instead, humans and other species are now supporting this activist movement by assisting one another for the sake of the planet. Revolutionary thinking is encouraged in this way, and it is hoped that change will occur at both the micro and macro levels, i.e., individual and global levels.

1.2. ECOFEMINISM

In order to be a solarpunk and to build Solarpunk futures, people need to be conscious of social injustices, environmental destruction in the world, and the interplay of these two issues. Solarpunk seeks to solve these problems by combining an egalitarian and constructive perspective with environmentally friendly, sustainable technologies. Yet solarpunks are also aware that some seemingly eco-friendly technologies without a solid foundation can be deceptive on the outside and cannot go beyond being tools of capitalism because technology is a human creation and it is inevitably affected by the humans' worldview and aims. Any technology without a positive and solid foundation can be destructive. As a result, Solarpunk has gradually adopted an ecofeminist philosophy, and future fiction constructed in this direction has begun to become more inclusive, fairer, and positive. Thus, before delving into Solarpunk futures, it is necessary to first comprehend what ecofeminism is, and how it emerged and evolved.

Long before ecofeminism, which emerged during the 1970s, environmental and climate-related issues had attracted people's attention. There had been hypotheses about the changes in nature. Although these changes were mostly results of the Anthropocene Era, according to Von Storch et al. (2006: 107), only in the twentieth century did the cause of climate change began to be perceived and evaluated as a result of human activities. There are, of course, some exceptions. Theophrastus, an Aristotelian student in the fourth century BC, is the first person in history to state that climate change could be caused by humans. Aside from that, the reason for the changes was mostly interpreted as either God's wrath or as a part of the Creation process. Nevertheless, people's role in effecting changes in natural processes has become more visible and thinkable due to causes such as technological advancements, the establishment of factories, mass production, wars, and related consequences such as rising environmental destruction, pollution, and change. The record of high-intensity gunfire in WWI, atomic bomb tests in the forties and fifties, and supersonic civil airplanes in the sixties and seventies gradually began to wake people up to their complicity in natural degradation (Von Storch et al., 2006: 109). Topics such as increasing injustice in the world, exploitation of the Third World countries,

overconsumption, overproduction of waste, pollution of water, loss of forests and their ecosystems, and so on became people's primary concerns. These dark concerns contributed to increasing numbers of dystopian narratives, but dystopian thinking was not the only reaction to the changes. Rising consciousness about the environment and the resulting environmental protests also marked the return of utopian thought in the sixties. Earth Day was celebrated for the first time on April 22, 1970. During the seventies which were a very active period, environmentalism "has undergone numerous changes, reflecting new scientific ideas, changing political and policy settlements, shifting institutional concerns, and new epistemologies of the natural and the social" (Garforth, 2017, Ch. 2, Whole earth, new futures section). With the publication of *The Limits to Growth* (1972), a report based on a computer simulation, it became clear that resources would not be sufficient for the current capitalist system and would eventually run out. The report proved the growing environmental pollution and destruction were caused by industrial capitalism's desire for constant growth and progress.

At the same time, feminist thinkers of the rising Women's Liberation Movement also began to express their concerns about environmental destruction. They contended that this aggressive attitude toward nature is motivated by a domination logic that views both women and nature as Other and inferior, and claims the right to exploit and harm them. In this way, feminists proved it was "no longer possible to discuss environmental change without addressing social change"; therefore, the oppression of women and the damage to the environment could no longer be considered separately (Gaard et al., 1993: 236).

These two movements, running in parallel and interacting with each other, over time created a new branch called ecofeminism, which was first coined in 1974 by Françoise d'Eaubonne. Ecofeminists are motivated by the similarities between the patterns of domination of both women and nature by patriarchy and androcentric capitalism. The goal of ecofeminism is to challenge the dualist and essentialist patriarchal system through a variety of methods and discourses such as poststructuralism, postcolonialism, and posthumanism. Based on the methods and discourses used, ecofeminism is divided into many subcategories such as radical, cultural, vegetarian, spiritual, and so on. It should be noted that these categories may

change over time and no ecofeminist adheres to a single school. Closer to cultural ecofeminists, American philosopher Carolyn Merchant, for example, is connecting the emergence of the dualist view to the Scientific Revolution when the conception of nature changed from organic to mechanical paralleling a considerable decline in the status of women and their resulting impoverishment and dependency on male power. In this way, she challenges patriarchy through its tools: modern science, and historiography. This way she shows the patriarchal bias behind them. As such her book, *The Death of Nature* (1983), has been considered an important resource for understanding how this logic of dominance and dualism took shape in Western thought, science and religion. Merchant (1983: xvi) states that “between the sixteenth and seventeenth centuries the image of an organic cosmos with a living female earth at its center gave way to a mechanistic world view in which nature was reconstructed as dead and passive, to be dominated and controlled by humans”.

Historically, before the Scientific Revolution, both humans and non-humans belonged to the organic community, and aware of their co-dependency, the former respected each other and nature as parts of a living entity. Nature, which was imagined as female from time immemorial, was believed to be sacred and seen as a teacher instead of something to be controlled and civilized. People knew how to act in unity with it. But gradually over time, especially with Western-based patriarchal thought systems, domination and mastery became more dominant and began to replace values such as kinship and community. Intuition, collaboration, and holistic connections were abandoned.

The earlier organic system of interdependent parts was replaced by a hierarchical mechanical system. This scheme can have variations such as culture/nature, male/female, universal/particular, rationality/animality, mind/body, white/non-white, and so on. In this categorization, the second one is always inferior and worthless to the first. In this way, “the identity of the master” is created and it expresses itself “most strongly in the dominant conception of reason, and gives rise to a dualized structure of otherness and negation” (Plumwood, 1993: 42). By creating a self/other dualist order or scheme, Westerners saw themselves above everything and everyone in the world. In fields such as religion, philosophy, and literature, which are the products of this system of thought, the tie between nature and women helped

degrade both as servants of man because of their nurturing, productive, and caring characteristics. But they were chaotic and sources of disorder, as well. The decline in the status of women and nature is a result of the conceptualization of both as such and, thus, of the need to have control over them. Wilderness and its uncivilized inhabitants, and the witch became parallel symbols of this same conceptualization. According to Merchant, this parallel marks the history of colonization in America:

The disorder symbolized in the macrocosm by the dissolution of the frame, of nature and the uncivilized wilderness of the new world, in society by the witch who controlled the forces of nature and the women who overturned its order, arid in the self by the bestiality of the Indian and the cannibal, the sexual lust of the female, and the animal passions of all humans heralded the death of the old order of nature. (1983:148)

According to this passage, the disorder includes not only women and nature, but also indigenous people, who fall into the same category. Unless they were controlled, they were all a threat.

As a product of this thought system, with the Scientific Revolution, nature was turned into a “mindless, submissive body” (Merchant, 1983: 190). Rather than being regarded as a living being, everything organic has been transformed into a repairable machine. In this way, nature came under the domination and mastery of humans. The logic that led to such a transformation resulted from the Revolution’s following ideas: First, at the basis of the universe, there is order, not chaos. Second, everything can be analyzed and explained through reason and logic. Third, everything is made up of particles, so they can be broken into pieces and studied. Lastly, nature contains secrets and hidden knowledge, and people have to work on it to access this information. This is how a complete transition has been made from an ecocentric or organic point of view to an egocentric or human-centric (anthropocentric) one. This new perspective was created with masculine values, such as power, violence, separation, and disconnection, as opposed to values associated with the feminine such as connection, compassion, community, and embodiment. The Western world used this new perspective as its new discourse for justifying its industrialization and exploitation.

Along with Merchant’s historical approach, other scholars such as Maria Mies and Vandana Shiva add depth to ecofeminism by criticizing patriarchy from a postcolonial perspective. Shiva uses her home country, India, to illustrate the negative

impact of colonialism on both indigenous people and nature. She examines the country's transformation from Motherland to Fatherland as a result of the patriarchal system's invasion. The colonized country, which became a part of the global system, has not been liberated but has instead become the victim of new restrictions and oppressions. The unifying and protective properties of the soil, which are identified with motherhood, have been replaced by a dictatorial father symbol that separates and suppresses. Instead of peace; chaos, and competition, as essential parts of the new system, began to dominate the country with the destruction of diversity and organic ties both in the soil and in society. Shiva (1993: 112) explains this situation as follows: "diversity is mutated into duality, into the experience of exclusion, of being 'in' or 'out.' Intolerance of diversity becomes a new social disease, leaving communities vulnerable to breakdown and violence, decay and destruction".

The conversion of the land from the motherland to the fatherland is also embodied in the word patriotism. Because those who invade these lands call themselves patriots, to comprehend their motivations, it is worth investigating the term. This word, which appeared in English in the sixteenth century, was derived from the Greek word *patris*, that is, father. There are different kinds of patriotism, but according to the *Stanford Encyclopedia of Philosophy*, they share a common aspect which is to "defend and promote what might be termed the worldly, i.e. non-moral, interests of the Patria: its political stability, military power, riches, influence in the international arena, and cultural vibrancy" (Primoratz, 2020). As it is understood, the priority is no longer people and land, but the system's values such as money and power.

The mentality that underpins invasion and colonization of Third World countries is dualist in nature. Westerners consider other people's natural living conditions, such as those of Asians and Africans, to be primitive. Because they maintain their distinct lifestyles, these communities are mistakenly viewed as underdeveloped and impoverished by Westerners. Therefore, they justify their invasion of the lands of such people, by making it their mission to civilize and industrialize these Third World countries. They separate the people living in these lands from their natural living conditions and exploit their physical strength and fertile lands, thereby integrating these indigenous people into the capitalist system and making them poorer. In short, Westerners force these countries and people, whom they

see as both inferior and a source of income, to become a part of the system because they are outside of it. Because of the capitalist system's insatiable character and constant demand for progress, it is always in need of cheap labor, fertile lands, and raw materials. Meanwhile, as a result of this demand, all living things, from humans to animals, suffer as the ecosystem deteriorates. Problems such as drought, environmental degradation, erosion, famine, and the incorporation of indigenous people into the production system, and thus the debt system, begin to emerge (Gaard et al., 1993: 239). Perhaps the most painful aspect is that among all the oppressed, women and children are more oppressed and damaged. That is why colonization and exploitation of the Third World countries is also one of the main concerns of ecofeminism.

As an example, the role and burden of women of color in the food production sector can be mentioned. The labor of women who work in the fields in poor conditions and for low wages in order to provide raw materials for food production factories may be wasted due to the chemical wastes produced by these factories. These wastes can pollute the soil and water, as well as render the products to be harvested unusable over time. Just like the food industry, the clothing and fashion industry are also other areas in that women of color suffer. These women, who are hired for mass production of clothes, again work in poor conditions. They may have to leave their children behind in order to go to factories far away from where they live to provide a better life for their children, and they may be separated from them for months. Furthermore, women sometimes die as a result of toxic gas exposure or occupational accident such as fires. Besides, because of the contamination of water and other natural resources with industrial waste, their children, who often live in the vicinity, suffer from malnutrition, various diseases, or can be born with disabilities. Morgan refers to a particular example in the city of Kanpur, India (Morgan, 2015, 0:53:02).

All these examples are results of environmental racism. This term specifically refers to the dumping of industrial wastes produced by the affluent whites (and globally by the West) into the living quarters of poor non-white races or to Third World countries. E-waste, for example, is a major problem in the twenty-first century, ranging from small unused devices like computers, telephones, and CDs to larger devices like freezers, washing machines, and medical technological equipment. These wastes are

sent to countries such as Pakistan, Nigeria, and Ghana to be recycled. While the children of poor families are encouraged to work in these recycling jobs because their small hands “are more dexterous than those of adults,” even those that do not work are not safe because they generally “live, go to school and play near e-waste recycling centers where high levels of toxic chemicals, mostly lead and mercury, can damage their intellectual abilities” (World Health Organization, 2021).

The fact that children in Third World countries are considered worthless and their lives are ignored begins in the mother’s womb. The uncontrolled reproduction of poor people, which has reached epidemic levels in underdeveloped countries such as India and Bangladesh, has been seen as a problem to be solved by Western scientists (Mies, 1993: 191). While white and middle-class people are encouraged to reproduce, many methods have been used to prevent the reproduction of poor and skin-colored races. Of course, women have been the subjects of these scientific studies and experiments. Scientists have begun to use *sterilization* procedures that destroy women’s fertility in Third World countries, which they see as vast open-air laboratories. While female fetuses are slaughtered in the womb in India to reduce future fertility rates, poor women in Bangladesh are bribed with wheat and their fertility is taken away (Mies, 1993: 190-1). As a result of this process, women’s bodies have disintegrated, been discarded, and manipulated into objects. All of these atrocities occurred under state control in the name of family planning, and patriarchy made it necessary to sterilize women not only through science but also through the government.

The occupation and conversion of Motherland into Fatherland does not happen only in Third World countries. According to Maria Mies, a Western academic, her home country Germany went through this process as well, and women, regardless of religion, language, or race, were once again victims.

Since the beginning of the modern nation-state (the fatherlands) women have been colonized. This means the modern nation-state necessarily controlled their sexuality, their fertility, and their work capacity or labor power. Without this colonization, neither capitalism nor the modern nation-state could have been sustained. And it is this colonization that constitutes the foundation of what is now being called ‘civil society.’ (Mies, 1993: 120)

As mentioned earlier, there was a long-standing belief in history that women should be “controlled,” as they were seen as the causes of disorder and chaos, just like nature. This has been part of the civilization effort, which requires no less than military force. Militarization is one of the most damaging things to living things and life on earth. Men who go to war zones, as well as women and children who are left behind after their deaths, must deal with issues such as unemployment, hunger, and homelessness, and in some cases, they must migrate. Another problem is the environmental pollution that occurs both in the production and use of items such as weapons, planes, and tanks. Not only people but also animals are harmed on the battlefields. As Gaard (1993: 246) exemplified, some animals are on the verge of extinction as a result of the Vietnam War, and many forests were burned and destroyed. However, wars are not the only forms of militarism. It is also a term that is linked to a slew of other harmful government-enforced policies and acts that contains violence and oppression. Therefore, militarism also includes things like the deliberate destruction of nature and the implicit support of misogyny and violence against women with impunity.

According to Gaard, when the system begins to harm any living being, others begin to be affected by this damage, as well. Therefore, sexism and speciesism are linked because everything on Earth is interconnected, which is also an important issue for both ecofeminism and Solarpunk. Animals, for example, are counted as living beings and individuals in Solarpunk fiction. They are loved and respected. Because Solarpunk has an ecofeminist sensibility, it recognizes that every living being on the planet is significant and plays an important role in the ecosystem. Animals, like humans, are a part of the natural world. As a result, they appear as active participants, and occasionally as protagonists, in Solarpunk stories. Even if they are not the main characters, the plot revolves around their lives and struggles, such as hunger and habitat destruction. In this way, the capitalist and patriarchal order’s and discourse’s insensitivity to them are countered. Because discriminatory attitudes like sexism, racism, and speciesism interact with each other, through this attitude a challenge is created against other discriminatory attitudes of the same system and discourse, as well.

Lisa Kemmerer (2011: 26) expresses this connection and the following chain of exploitation as follows: “sexist men view women as objects (for sexual gratification, household labor, or as status symbols); racists view other races as objects (slaves, cheap labor, athletes); speciesists view nonhuman individuals as objects (meat, livestock, pets).” In this chain system animals, viewed as objects by speciesists, have undergone a systematic reification process. One of the most important steps in this process has been portraying them as food. Just as women’s fertility is used and controlled, animal bodies are used and controlled as human food. Even in this process, there is a difference between the treatment of male and female animal bodies. While the male species of the animals that fall into the category of consumable animals are sent to the slaughterhouse because they are not productive, the female species are first used for their products such as milk and eggs, and then they share the same ending with their male counterparts. This exploitation ignores not only the fact that animals are living things with feelings and can suffer but also the environmental devastation caused by the production-consumption cycle of animals and animal foods.

It should be noted that these “animals’ bodies are scientifically manipulated in order to more take advantage of their ‘products,’” and what permits this manipulation is science’s perspective on animals (Gaard, 1993: 243). In human/animal dualism, making experiments on the inferior side is seen as a right by the superior side. Because, if we recall the historical origins of modern science, these animals, as parts of dead and mechanized nature, hide their secrets within them, and breaking apart their bodies is no different than taking apart a machine. However, in ancient times animals were seen as a part of sacred nature, and when they had to kill them for food, they performed rituals such as apologizing to them, blessing their souls, and thanking nature. But in modern capitalist patriarchy, more than a hundred million animals are killed every year in American laboratories without any regrets (PETA, 2021, Facts and Statistics About Animal Testing). Animals need protection, shelter, and nutrition, just like humans, but they are “confined to barren cages, socially isolated, and psychologically traumatized” in laboratories and animal food production factories (PETA, 2021, Facts and Statistics About Animal Testing). The reason why they can be harmed so easily is that animals, in most countries, do not have any legal rights unless they are owned by someone, a human. This creates a set of new problems because only certain domestic animals can

be owned, only in certain countries are these laws in effect, and these animals are put into the position of slaves because they need ownership to be counted legally as living beings. The pronoun used for animals in English is the same as that used for inanimate objects. Only the animals that are owned and given a name are usually mentioned with gender nouns such as she/he.

The depreciation and objectification of animals indirectly affect non-white women. They are considered animals, especially by white men, and just like animals, women are considered less human. In other words, there is a reciprocal interaction between the animalization of women and the feminization of animals. For example, African women who were brought to America were seen by white men as exotic others and associated with wild animals. This view persists even today.

Women of other races, as well as African women, are subjected to the same attitude, particularly in the United States. They are seen as soulless, therefore, as an object or less human. That is why they sometimes hear the question “What are you?” from society (Park, 2011: 79). This question arises from the dualist discourse’s need to classify in order to control and oppress. Thus, Christine L. Garcia, an animal attorney, suggests a new perspective, a new way of thinking that can liberate women, animals, plants, people of color, and others. This new ecofeminist perspective has the power to deconstruct the hierarchal, patriarchal, dualist, essentialist, and egocentric system.

Figure 1: A Hierarchal Triangular Scheme and Spiral Alternative Scheme (Garcia, 2011: 148-49)

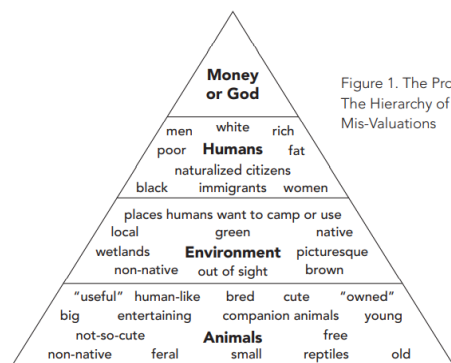


Figure 1. The Problem:
The Hierarchy of Human
Mis-Valuations

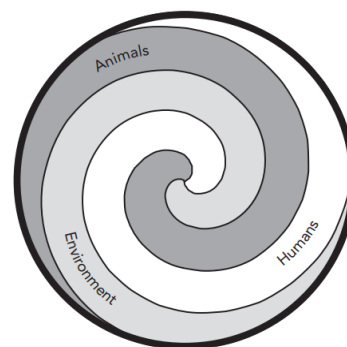


Figure 2. The New Mindset
of Life Valuations

In her suggested new scheme, rather than a hierarchical triangle that only accepts a small, privileged society at the top, Garcia devises a circular scheme. Nothing is higher than any other thing in this circle (2011: 148-49). Everything is linked and related to one another. Non-human entities such as robots, artificial intelligence, clones, hybrid beings, and cyborgs are also included in this new scheme. Since they are hybrid beings, they are reminders of race mixing and other forms of hybridity that Western thought is keen to expel as inferior and impure. Therefore, adding them to this circular diagram would be particularly subversive and liberating. It is especially because of these entities' chaotic and confusing qualities that the dominant discourse's "What are you?" question would remain unanswered. Similarly, just as androgyny is used by feminists to challenge gender norms, hybrid entities such as cyborgs can also be used to challenge speciesism.

Garcia's new structure is also reminiscent of the emphasis ecofeminist thought places on the importance of nonlinearity, which follows the cycles of nature. Reviving the cyclical structure of nature means resurrecting the values we have lost associated with nature, just as in the transformation of the motherland to the fatherland. In this new scheme, there are no masters and mastery over other beings. On the contrary, harmony, unity, and integrity are emphasized. Solarpunk helps revive this deconstructive vein in ecofeminist philosophy in the twenty-first century: "We're no longer overlords. We're caretakers. We're gardeners" (The Solarpunk Community, n.d.). Now it is necessary to be a "gardener" and work in harmony with nature because otherwise each of us will be nothing more than the creator of our destruction.

Parallels between ecofeminism and Solarpunk can be observed in the solutions they bring to problems we face. Ecofeminists suggest some suggestions about what to do to for establishing harmony in the world: the creation of self-sufficient societies that are able to produce and live on basic needs; "decentralization from a state bureaucracy"; kinship, respect of diversity, "a network of reliable, stable human relations" and love for nature; a versatile and creative thinking system for problem-solving; rather than completely rejecting science and technology and adopting a regressive viewpoint, replacing the viewpoint that supports dualist thought and hegemony in these fields with an ecological and feminist viewpoint, making science and technology beneficial for nature and people; and lastly "a reintegration of spirit

and matter” (Mies, 1993: 319-22). All these solution suggestions are supported and implemented by solarpunks, as well. They argue that the social structure can be changed with the use of renewable, natural, and sustainable energy sources. The main question that fuels their motivation is “What does a sustainable civilization look like, and how can we get there?” (The Solarpunk Community, n.d.). They create a polyphonic movement for this new civilization by involving people from all walks of life in the thinking and implementation process. New Urbanism and New Pedestrianism⁴ are some of the principles they propose for these new sustainable futures. Just like ecofeminism, they offer to unite spirit and matter, rather than to defend one aspect of life. In an effort to destroy dualisms, they combine contradictory-seeming concepts such as spirituality and science.

Since ecofeminism is a very broad and multifaceted area of thinking, it has many sub-branches; therefore, there is no one right way to be an ecofeminist, just as there is no one right way to be a solarpunk. The same is true for Solarpunks, who embrace “a diversity of tactics” and each of whom creates her/his/their/zir own ecologic and just future by combining her/his/their/zir ideas, cultural values, and local methods with global ones (The Solarpunk Community, n.d.). It will then not be wrong to suggest that we can call solarpunks the Ecofeminists of the twenty-first century.

Like ecofeminists, Solarpunk also envisions a world where racism, sexism, and speciesism will not be applied to life and the victims of these discriminatory policies today will be writers, masters, and protagonists of their own stories and an important part of this communal movement. The issues that ecofeminism emphasized and fought against decades ago persist today; therefore, each person’s perspective is a necessary step on the road to a solution.

It should be noted that ecofeminism, like Solarpunk, is not just a philosophy and politics with activism. It also has literary representations. In fact behind the rise

⁴ New Urbanism is an urban design movement that began in the United States in the late 1980s and early 1990s. It was founded by a group of people from various fields, including architects, engineers, and city residents, who came together to criticize modern city life and structures. It essentially proposes city designs that preserve the city's historical texture, highlight geographical and ecological features such as flora and fauna, aim to eliminate all forms of discrimination caused by faulty urbanization, encourage walking and cycling instead of driving, strengthen human relations, and increase communal activities. New Pedestrianism, coined by Michael E. Arth in 1999, is a more eco-friendly and pedestrian-friendly version of New Urbanism. The use of cars is reduced even further in this proposed city design, which is based on the period before WWII, with the goal of turning the roads into linear parks.

and acceptance of ecofeminism, there is a strong fictional world in which authors challenged and revised the male bias and male norms in sci-fi before it was remolded by Solarpunk because these works are regarded as the pioneers of Solarpunk.

1.2.1. Ecofeminist Science Fiction

Since its first emergence in the 1970s, for ecofeminists, sci-fi has been an important genre because it develops a critical perspective on cultural norms. As a result, the aforementioned paradoxes within the genre, in other words, the continuity of the patriarchal patterns and discourses that contrast to the innovative and challenging structure of the genre, began to be resolved. Sci-fi was liberated with the introduction of ecofeminist writers to the genre, which began to provide a sense of cognitive estrangement distinct from that found in classic sci-fi narratives, which were primarily written by white male authors, and to inspire readers to think and change by presenting them with truly different futures. The main themes and subjects in these narratives are community, sustainability and earth-centered ways of living, non-patriarchal structures, equality, diversity, interconnectedness, and harmony. These narratives are also written from a critical perspective. Authors, to create futures according to these principles, propose “a new set of cultural practices, from religion to agriculture, intended to sustain the complexity and diversity of both ecosystems and human communities in a peaceful, consensus-driven manner” (Micale, 2002: 90). Self/other dualism is broken down in ecofeminist sci-fi by interconnectedness and care-based societies. Individual success is no longer as important as societal success and improvement. People are united not by blood, power, or money, but by a common goal and kinship. The fluidity and complexity of the relationships are sources of dynamism in society. True progress begins when society’s dynamic is changing and transforming. As a result, we can say that most authors who use society as a novum are ecofeminists. According to Merrick (2003: 248), in such narratives, authors, for example, create large families as well as a communal life as a challenge to the notion of the nuclear family; thus, there is not just a father and a mother, but a large number of caregivers for children. In addition to proposing alternative social orders, ecofeminist sci-fi authors also use posthuman figures like cyborgs for their

revolutionary value. This is one of their techniques to destroy the technology/nature duality both in real life and in fiction. Although not included in the two books shown as examples, this figure, which has a significant place in Donna Haraway's articles, is revolutionary in many ways. While some ecofeminists are skeptical of this figure, the cyborg has the power to deconstruct many categories such as sexism, racism, and speciesism. Because it combines "the natural with the technological, exhibit interdependence, connectivity, localization/situatedness, and difference/diversity, the same principles that bolster ecofeminism" (Micale, 2002: 129).

To shed light on how ecofeminist themes and purposes appear in sci-fi, *Ecotopia* (1975) and *The Fifth Sacred Thing* (1993), which are in fact accepted as early Solarpunk works, will be analyzed. In this way, the strong link between ecofeminism and Solarpunk will be seen once again.

The first work to be discussed is *Ecotopia* (1975), which is set in the near future and takes place in a region that includes Oregon, Washington, and North California. This region is known as Ecotopia, and it is a utopian place haven cut off from the rest of the United States, which is plagued by chemical waste and air pollution. William Weston, the protagonist, is the first journalist to visit the Ecotopia, to observe and report on life there. Ecotopia and the rest of America are biased towards each other. William begins to observe Ecotopia as a victim of these prejudices, but as time passes, he realizes that this place is not as bad as it has been described, that the people are not barbarians, and that this new social order is exactly what humanity requires. At this point, it can be thought that Callenbach is using the classical scheme of old utopias, namely a traveler visiting an enclosed and perfect place on Earth. However, the protagonist undergoes a continuous transformation and becomes an active member of the Ecotopia community.

In many ways, from society to lifestyle, technology to politics, Ecotopia challenges both the period in which it was written and the Americans who represent that period in the narrative. This is due to the author's critical viewpoint and the numerous ecofeminist elements he incorporates into the narrative. *Ecotopia*, as a sci-fi work, is one of the narratives that save the genre from its paradoxes and offers the reader a truly new and alternative future as a result of these elements. The notion of

family in Ecotopia, for example, is a challenge to the patriarchal and nuclear family order that existed at the time the book was written:

...along with Ecotopia's decline in population, the nuclear family as we know it is rapidly disappearing. Ecotopians still speak of "families", but they mean by that term a group of between five and 20 people, some of them are actually related and some of them are not, who live together... Ecotopian life is strikingly equalitarian in general... It's difficult for an outsider to determine the bonds that hold the communal groups together, but children may be a key factor... (2004: 64)

This sample family structure is community-based and actually a microcosmic creation of the world's total population who live together. By creating a community such as this, Callenbach encourages people to respect and love each other without discrimination. Interrelation, communal decision-making, and diversity are core values of these future societies. Things are done jointly and divided in such a society. As a result, rather than adopting a competitive and result-oriented work ethic, it is important to focus on help and process-oriented work ethic and to make the work or the task more enjoyable. Therefore, communication and interpersonal ties are strengthened, and injustice is eliminated as the workload is distributed evenly. Similarly, children are brought up together when everyone sees each other as members of a common and large family. In this case, the phenomenon of child-rearing, which in today's societies is attributed solely to the mother, is attributed to the entire society.

Non-patriarchal and non-linear structures are some of the main topics addressed in connection with community and equality, in ecofeminist narratives such as *Ecotopia*. In such narrations, consensus-based societies are common which propose a more democratic politics. Vera Allwen and her political stance is a good example to clarify this statement. Callenbach describes her as plain and sincere, and appears as the state senator of Ecotopia. While Vera's policy is free of hate and violence, it is also based on building unity rather than creating a we/them dichotomy. In this country, high-level political figures like Vera dress comfortably and perform their jobs in modest venues. It is important to note that in this society, especially about children, the last word generally belongs to women, as well. Thus, it can be seen that women's ideas and acts are highly valued in every area of life in Ecotopia. Freedom of

expression of emotions and sexuality are valued too in contrast to the tendency to hide emotions in other parts of America. Therefore, showing and expressing emotions does not mean weakness but something that should be appreciated.

Many ecofeminism-based practices can be seen when other elements in *Ecotopia* are examined in relation to social life. For example, although money is still used, it has been redesigned with an ecocentric perspective, with images of animals and nature replacing images of people. The structure of institutions such as schools has also been altered. Instead of classrooms arranged in buildings according to the logic of the old industrial period, children are mostly educated outside, with an experience-oriented schedule. Teachers are not authority figures, instead, their main task is to help and guide. Health institutions are not only places that serve the pharmaceutical industry and focus on physical recovery, but also places that prioritize psychological recovery.

Aside from the examples given, one of the important aspects of Callenbach's utopia that he reinterpreted is the relationship between human technology and nature from an ecofeminist perspective. Ecofeminists are against the capitalist and patriarchal biases in science and technology; therefore, they seek a sustainable and earth-centered way of living. Thus, ecofeminist authors build worlds where technology and nature are in harmony and where nature and culture are not in a dichotomous relationship. As Merchant (1983: 96) notes, "until the appearance of Ernest Callenbach's *Ecotopia*, in 1976, modern utopian authors had not explored the possibility that a society could live in harmony with its environment while continuing to utilize many of the advances made through modern technology." Rather than completely rejecting science and technology, ecofeminist sci-fi "takes a new approach that breaks down the barriers between science, nature, mind, body, self, and other" (Micale, 2002: 122). It proposes the widespread use of renewable and sustainable energy sources and technologies, recycling, and DIY ethic to achieve a stable-state economy and organic agriculture. Rather than exploiting and harming nature, it defends collaborating with it. Every source of energy, including humans, should be used efficiently, and technology can be of great assistance in this regard.

Callenbach, like an ecofeminist, takes a critical stance at this point to correct the relationship between technology and nature, demonstrating that technology can be

environmentally friendly and sustainable. Of course, such an approach leads the reader to reconsider the technology/nature dichotomy, and even to conclude that such a dichotomy should not exist.

In ecofeminist sci-fi, low and high-tech can coexist, as well. For example, in Callenbach's novel, metals that existed in the region before the establishment of Ecotopia were recycled and reused, especially for public transportation vehicles. Wooden houses or biodegradable DIY houses are common. Furthermore, it is clear that old technological tools are not being abandoned in the name of progress. While modern high-speed trains are widely used by Ecotopians as transportation, an older technology such as the typewriter is also widely used.

However, all these high-tech structures and gadgets are far from being cold, grey, uninviting, and incomprehensible. On the contrary, they are warm due to their earthy colors, welcoming, and in harmony with nature. High-tech devices or machines are frequently designed to be understandable and usable only by people with a certain level of knowledge due to the hierarchical and patriarchal background of science and technology. This results in a problem of inaccessibility in these technological creations because it creates a certain distance between the user and the technology. Such distances have been removed in Ecotopia, and high-tech has become a part of people's daily lives. The white male protagonist, who comes from a hierarchical, patriarchal, and dualistic society, is taken aback by this situation. The comfort and invitingness of the high-speed train he takes for the journey are described as follows:

It looked more like a wingless airplane than a train. At first, I thought I had gotten into an unfinished car-- there were no seats! The floor was covered with thick, spongy carpet, ... Their sentimentality about nature has even led the Ecotopians to bring greenery into their trains, which are full of hanging ferns and small plants I could not identify. (Callenbach, 2004: 7)

In Ecotopia, cars have been banned in order to reduce carbon footprints; therefore, public transportation is encouraged, like this train. Electric minibusses are manufactured, but most people prefer to walk. Some repairable products or homemade technology, such as a watermill that activates a radio, are also common. Ecotopians also attempt to produce electricity from plants in order to achieve energy sufficiency.

Sun and water are the main renewable energy sources. The natural ecosystem is reanimated. Harmful technologies and methods like microwaves or food packaging are banned. Most of the noisy machines are repaired so that they will not disturb people and animals. Thus, it is understood that Ecotopians are the happiest when they do not dominate other living things on Earth, but they live with them in a balanced way (Callenbach, 2004: 44).

The Fifth Sacred Thing (1993), written by Starhawk, is one of the sci-fi narratives that contain many ecofeminist elements, therefore, it shares many similarities with *Ecotopia*. By comparing utopia and dystopia, the work, which also focuses on the American West in the near future, defines the north of California as utopian and the south as dystopian. With the uprising and revolution in 2028, the northern part, The City, becomes an autonomous region. The City becomes a utopian place over time in the 2040s post-apocalyptic world, both by attempting to mitigate the effects of environmental destruction and by establishing an egalitarian social order based on love, care, and respect for both nature and all species. Dualities, patriarchal, hierarchical, and discriminatory order are abolished in the North, in favor of diversity in every field, such as religion, language, and race. Renewable energy resources and technologies are preferred and a consensus-based form of government is chosen by the citizens. This consensus-based government is made up of many councils and the main council is led by a group of elderly women and representatives of the four sacred things; therefore, it shares the same ideals with *Ecotopia* in terms of preferring women to lead both the country and the society. The belief and respect for the five sacred things, namely water, fire, air, earth, and spirit, underpins this entire thought system and its values in The City. These five sacred things are not to be owned by anyone in this pagan community. It is also important that as the protagonist, a woman is chosen instead of a white male hero. Yet, the point of view changes between the three main characters. These are the old Maya, the healer Madrone, also the protagonist, and the Bird, who was abducted and tortured by the South.

The South, on the other hand, is a place ruled by patriarchal forces in the narrative, and there is a conflict between the North and the South. The South is co-ruled by a militarist group called the Stewards and a Christian group called Millennialists. Environmental destruction is at an all-time high in this place where the

capitalist order is still in place, and people are constantly oppressed by discriminatory and violent rhetoric and actions. Unlike in the North, access to natural resources like water and food is limited. The southern rule has resulted in racism, sexism, class inequality, religious oppression; the continuing harm of industrialization and technology to nature and all other species; the exploitation and exclusion of marginalized people in all aspects. In these ways, the South has many similarities with *Ecotopia's* America, which is struggling with many different types of pollution and is based on progress and industry, namely capitalism. Despite all these, when the South invades the North with a regiment of soldiers and attacks The City's residents, the North maintains a nonviolent attitude and makes peace with its soldiers, telling them that they have a place at their table, even though some people of The City want to respond to violence with violence. With the constant and deep contrast that she creates, Starhawk clearly demonstrates how an ecofeminist philosophy can change the world's future. Although the world has deteriorated to the point of being post-apocalyptic, the author demonstrates that everything can be reversed and healed by adopting an ecofeminist philosophy and ethics.

It is critical to examine the author's future city and society structure at this point. In the San Francisco vision of Starhawk, namely The City, many races and ethnicities live together. "Differences of color, gender, age, sexual orientation, or physical ability are not allowed to restrict a person's opportunities" (Starhawk, 2007). The North supports polygamy and homosexuality, in contrast to the South's hypocrisy, which promotes heterosexuality and monogamy while concealing sex slavery of underage girls. Sexuality is seen as something healing and creative and all sexual orientations are welcomed. This type of sexual freedom is reminiscent of *Ecotopia*, in which people are at peace with their bodies and celebrate it through sexuality.

There is diversity in religion, too. The paganistic aspects of the Northerners of Starhawk and Ecotopians of Callenbach are similar in that they both have an earth-centered perspective promoting equality as opposed to hierarchical religions like Christianity. Every citizen, regardless of religious belief, supports each other by participating in religious ceremonies and celebrations.

All family structures are also welcomed and they help each other. Every child can have "half a dozen aunties and uncles" (Starhawk, 2007). Therefore, children

growing up in this natural diversity become naturally multilingual. The Black Dragon House may be the best example to examine the concept of family. This is where the main characters, Madrone, Maya, and Bird live. Bird is the grandson of Maya but Madrone is the granddaughter of Maya's ex-lover, Johanna. The bond of love takes precedence over the bond of blood in this case, and this house is also a place where many other people can visit and stay. Just as the concept of family is open and flexible, so is the concept of the home associated with it, and it becomes a welcoming environment for all.

In contrast to *Ecotopia*, in the 2040s San Francisco, the city structure has been arranged in such a way that it can be useful for people with disabilities. While the mobility problem is eliminated for individuals using wheelchairs, sign language is also made a part of daily life to reintegrate deaf people into society. The city is a safe space for all that encourages walking around and not an environment of chaos.

Everything, especially food and water, is for the general good. The City's education and health care systems are nearly identical to Ecotopians'. People blend Western medical science with Eastern medical practices. It is more valuable to become a healer than to become a doctor or a nurse. Every task is shared, and because of a decentralized economy, everyone is self-sufficient, just like in Ecotopia.

One of the most important elements in such societies that are created by ecofeminist authors is their inclusion of other species in their daily life. As Micale (2002: 89) indicates "ecofeminist politics and praxis must derive from a new definition of self that includes relationships with non-human nature, a new ethics which takes the many 'voices of nature' into account, and new languages and rituals that celebrate human and ecosystemic diversity," respecting trees and animals, attempting to understand them, and even learning their language, as seen in *Ecotopia*, is essential for challenging the silenced Other logic. Ecofeminist sci-fi is significant because it accomplishes what realist narratives cannot. By showing the possibility of communicating with nature, it makes its readers to realize how everything is interconnected on Earth. In *The Fifth Sacred Thing*, The Council is a good example. Four sacred things' representatives have a voice and they are consulted. They are White Bear, the representative of Earth and North; Hawk, the representative of Air and

East; Coyote, the representative of Fire and South; Salmon, the representative of Water and West.

Starhawk's Northerners are very much like Ecotopians in terms of their use of technology. Indeed, she demonstrates the types of changes that can occur in the good and bad use of technology through two opposing systems, such as the North and the South. On the one hand, there is the South, where unsustainable technology and industrialization create social injustices and environmental degradation. Today's patriarchal and hierarchal system both in science and social life still continues in the future. On the other hand, there is the North, a place that is constructed through paganistic and ecofeminist sensibilities. The City is like a garden of "a mosaic of jewel-like colors set in green" with so many solar panels and wind tribunes (Starhawk, 2007). People use natural materials such as bamboo and wood, as well as biodegradable materials such as corn and soy-based plastics. These practices are the same as Ecotopians' practices. Air conditioning is not used, instead, windows are opened to provide natural air circulation. Natural and renewable energy sources, such as wind generators and solar panels, are widely used. Hemp is now used to make paper instead of trees. Within the framework of environmental ethics, modern technology is blended with renewable energy sources in every field. Technology, unlike in the South, which is a reflection of today's world, is no longer an element that destroys nature; rather, it has evolved into an element that works in harmony with and protects nature. This is one of the most significant steps toward dismantling the technology/nature dualism. However, probably one of the most interesting aspects of the technology in San Francisco is its harmony with spirituality and magic and there is no similar situation in Ecotopia. In The City, the computers and all communication systems take their energy from crystals:

Electronics were more susceptible to magic than physical locks and bars. The brain emits an electrical field; back home, they had developed entire technologies based on that principle, like the intelligent crystals in their computers that were programmed purely by visualization. (Starhawk, 1993)

These computers and communication systems that are based on crystal magic are sensitive to the energy and mood of people. When the tension and aggression level in the society rises, all systems shut down.

It is worth noting that, in addition to looking at the ecofeminist elements in these two narratives, they are also critical utopias. Despite all of the positive aspects mentioned above, the places mentioned in these two narratives, namely Ecotopia and San Francisco, are not perfect areas with no problems, as in old utopias, and they are still evolving. For example, in *The Fifth Sacred Thing*, while San Francisco appears to be a peaceful and cheerful city, the sea level has risen as a result of global warming, and a portion of the city has been destroyed. Nonetheless, people were able to make this part of town useful. Boats connect the skyscrapers above the rising water level, and some have solar films on their walls and wind turbines on top. Another situation that can be shown as an example is that even though it is a non-violent society, petty criminal activities occur from time to time. Generally, when a crime is committed, both parties are heard by a Special Council and a settlement is reached. In extreme cases, the individual is exiled to the far North, into the wild forests inhabited by more primitive tribes. Furthermore, not everyone adopts a nonviolent attitude, as evidenced by a desire of a group of people on the Northside to respond to violence with violence during the war between the North and the South. Likewise, there are flaws in Ecotopia that need to be overcome. Schools, for example, are still paid, and the prices of organic clothing are quite high. Furthermore, while the appearance of money has changed through a more ecocentric understanding, it is not a situation in which money has been completely abolished and all basic needs are provided for free, as in Starhawk's San Francisco. There are also ritualistic war games that result in the death of people. In Ecotopia, like Starhawk's violent backers, there are male-dominated political parties that oppose Vera's policies and promote individuality and productivity. Of course, this productivity is not in a positive sense; rather, it is analogous to the progress and capitalist-based productivity of America, which is located outside of Ecotopia's borders. Another important point to consider is that Ecotopians are prejudiced against both Americans and some races who live within their borders. Instead of a homogeneous society in which all races live in harmony, there are divided city-states or more accurately ghettos. Furthermore, some of them wish to be completely independent of Ecotopia. Africans live in one of these city-states, which is known as Soul City. In comparison to Ecotopia, this city's working hours and crime rates are extremely high. Serious penalties may be imposed as a result of this. Unfortunately,

Africans have not been able to overcome the criminal stereotype that has been assigned to them in the eyes of Ecotopians.

In conclusion, both Callenbach and Starhawk's ecofeminist philosophy-based critical utopias offer positive and hopeful near-future alternatives that point to many problems to be solved. These authors, and many others, are effectively using sci-fi as a form of activism, warning their readers about current issues and demonstrating that solutions are possible. As a result, these kinds of narratives help lay the foundations of the thought system that gave Solarpunk its optimism, or the "solar" feature. Now, in the following chapter, the genre's more well-known ancestors, Cyberpunk, Steampunk, and Dieselpunk, will be examined in order to understand the "punk" feature of the Solarpunk movement.

CHAPTER TWO

PUNK SUBGENRES AND SOLARPUNK

2.1. CYBERPUNK, STEAMPUNK AND DIESELPUNK

All of the subgenres discussed in this chapter are extensions of Cyberpunk, in which punk plays an important role both in name and content. Therefore, before delving into the subgenres, some background on punk subculture is required, because each subgenre interprets the punk attitude differently.

2.1.1. Punk

The punk subculture is a British-based movement that began to form in suburban and urban areas in the 1970s. Traditionally, the majority of groups that can be called punk are white, young, and middle-class male. They are fundamentally anti-, which means they are anti-consumerist, anti-establishment, anti-authoritarian, and so on. Although punk affected most of the countries in the world, the focus here will be on the evolution of punk in the United States.

To some, punks and hippies may seem like two groups with opposite emotional and strategic reactions, but they come from the same ideology, counterculture, and even the “same urban neighborhoods” (Marchetto, 2001: 2). The Beat Generation’s counterculture and hippies’ rejection of the current government, economy, and politics paved the way for punks. The real watershed moment that hippies would gradually evolve into punks, however, was the collapse of the flower children’s optimism in 1968. People became increasingly pessimistic and angry as a result of political turmoils, the Vietnam War, and demands that could not be met through peace and love. This is perhaps where the punks differ from hippies, both in their aesthetics and their behavior, for they emerged with this sense of anger and defeat in the early seventies. Alienation, nihilism, negativity, and violence were their dominant characteristics. They appeared to be uneasy with boundaries and categories. They questioned the hierarchy, and dominant cultural norms and discovered various ways to challenge them. They started to create their own rules with an urge for independence, an

emphasis on individuality, and an anti-conformist attitude. The basis of this action was the ethics of DIY, and punks who were against the production-consumption chain were expressing their “deep-seated discomfort with established ideas about the world” through the clothes they designed and especially the music they produced (Beer, 2014: 29). After the transition period, punk began to take an increasingly harsh and provocative stance in the late 1970s. With the influence of original British-based punk, they began to focus on body modifications, tattoos, and drug use and resorted to violence with a nihilistic attitude. Punk rock emerged during this period, as well. With an extremist attitude they:

...picked the most horrific elements of the past and incorporated symbols of the horrors in their style. They were anti-racist, yet wore swastikas and Nazi armbands. They were anti-religion, yet wore crosses. They mixed symbols and styles to shock and horrify onlookers. Punks hung out at railroad stations and bus stops so that the “normal” society would see them. Their statement was to be seen and to stand in the face of tradition in order to mock it. (Errickson, 1999: 8-9)

While this type of punk attitude has a place in Cyberpunk, it would be a mistake to generalize and say that every punk acts this way. Aside from this extremist stance, punk is a very stimulating and transformative attitude and movement. According to Beer (2014: 28), it is highly relativistic, based on multiplicity, open, playful, eclectic, outward-looking, and willing to draw on external cultural sources.

Punks, as Beer (2014: 28) clearly states, aren’t afraid of their own limitations and vulnerabilities; they demonstrate their bold attitude as well as their DIY ethic through their creativity and flexibility; they always find a way to make things happen and to be unconventional in establishing channels of expression and communication. Considering all these, it is understood that Solarpunk, with its diversity, creativity, solution-oriented attitude, joyful anarchist acts which are combined with art and technology, a realization of and urge for the improvement of the problems, and its rejection of nihilist and escapist tendencies, is the most punk of all subgenres and movements. Furthermore, the term “punk” is derived from a Native American word (Barnhart & Metcalf, 1997: 13). Because language and culture are intertwined, it is impossible to assess the meanings of words and their evolution without considering the values of the culture in which they are formed. Therefore, if Native Americans’

philosophy and culture are examined, it is seen that they have no concept of nihilism, extremism, or violence. As a result, starting a trend with this interpretation of the word is incorrect. This is the Western way of looking at things. In this case, there is a distortion. Solarpunk, on the other hand, destroyed these attitudes by restoring punk.

2.1.2. Cyberpunk

Cyberpunk is the most well-known and influential subgenre of sci-fi, emerging in the 1980s following the New Wave. The genre gets its name from Bruce Bethke's short story "Cyberpunk" (1983). It focuses on the possibility of a near future with high technology and low life. If the word is divided into two parts, such as cyber and punk, it can reveal much about its subjects. The "cyber" side is associated with high technology, the internet, cyberculture, robotics, and cybernetics, whereas the "punk" side is associated with rebellion, anarchy, violence, alienation, body modifications, drugs, and the use of slang language. After the feminist writers and critical utopias of the New Wave, with the growing influence of white male anarchist writers again, dystopian and apocalyptic visions met with technophobia. During the period when information technologies were developing and becoming more widely used, authors like William Gibson began to warn people about the potential consequences, criticizing the capitalist system and its approach to technology. These authors tried to "caution us how imbalance use of technology brings havoc and disturbance in the life of human beings" (Chougule, 2015: 4). The invasion of technology into human life and body is one of the main topics discussed. Technology has become an inextricable part of life and creation that many people find overwhelming. Furthermore, most of the time, in the narratives, people cannot avoid technology because technology has become a tool that connects them to the capitalist system. Therefore, there is a risk of losing the essence of humanity and freedom as a result of this kind of misuse of technology. People's fear of their own creations is also a source of technophobia. This situation is depicted in the stories as artificial intelligence and cyborgs that bring humanity's demise. Therefore, as Olliver Dyens states (2005: 5), technology for cyberpunks is a concept intertwined with life and death, and depending on the method of use, it can result in both utopia and dystopia. The authors' general focus is also on

the blurry lines between “the rational and the irrational, the new and the old, the mind and the body” that occurs as a result of the intertwining of technology with body and daily life (Cavallaro, 2001: xi). The feelings of unease and uncertainty engendered by this intertwining are demonstrated in the narratives in this way.

Gothic, hard-boiled detective fiction and noir, mysticism, and mythology are among the elements that comprise the subgenre, as well. The combination of gothic elements and punk structure gives the subgenre a pessimistic and frightening tone. This gothic background, manifest both physically and psychologically, reflects the fear felt by individuals who are threatened and oppressed by the capitalist order and rapidly developing technology. This fear manifests itself in narratives with elements such as alienation, terror, fragmentation, bodily disorders, violence, madness, diseases, and pollution. Cyberspace plays an important role in narratives as a gothic uncanny place where an individual can transcend. Massive, almost subliminal city structures suffocate the individual.

Mysticism and spiritualism, which often manifest themselves in connection with the Gothic tone, are quite intertwined with technology. Especially through the aid of augmentations, body modifications, the internet, artificial intelligence, and cyberspace individuals can cross their physical and mental limits to another dimension, become enhanced, and almost eternalized like a mythological character. The desire in Cyberpunk for transcendence is, in fact, traceable to Cartesian dualism, where the body is seen as a piece of meat, which also lies behind the posthumanist and transhumanist desires. Although transhumanism and posthumanism are similar concepts, the former refers to humanity’s enhancement and transition, whereas the latter considers humanity’s next form and what it means to be human. Julia Grillmayr (2020: 273) states that the transhumanist tendency in Cyberpunk is a continuation of the Enlightenment Era’s thought system. In the narratives, the cyborg figure, which appears frequently, is the result of apprehension rather than celebration. Because it cannot be classified, it perpetuates body/machine dualism and fear of the Other. Cyborgs and other creatures like them, such as androids and humanoids, are marginalized within these narratives and pushed out of society by various fears in such a framework. As a result, unlike ecofeminist sci-fi authors, Cyberpunk does not benefit from the cyborg figure’s revolutionary and duality-destroying potential. Therefore, by

adopting such discourse about this entity, this subgenre continues to contribute to today's dualities.

Along with the cyborgs, the protagonists of the stories are characters who are socially excluded. Misfits, hackers, detectives disguised as criminals, and other characters of similar nature, acting according to their ethical codes, are typically lone heroes of Cyberpunk. These socially isolated and rootless victims of the system frequently act on their personal motivations. Comprising mostly white, male protagonists, they may be taken as the twentieth century version of the old cowboys of rugged individualism. Instead of wilderness, though, they live in the urban space, which has its own chaos teeming with Anthropocene Era influences. "In postmodern technoculture, our world is less a planetary biosphere than a globalized technosphere, and in many cyberpunk worlds, an ecologically declining planet Earth is a generic expectation" (Hollinger, 2020: 326). Characters are surrounded by high skyscrapers, air pollution, and environmental destruction caused by wars and pandemics, and they live under dark, neon skies while walking through hologram advertisements, crowds, and narrow spaces. Their connection with nature is completely destroyed; therefore, the characters are indifferent to environmental degradation. The environment is always depicted in narratives as having been ravaged by a nuclear war, the growing number of factories in the capitalist system, or the climate crisis. Although the characters are aware of the negative consequences of the destruction, they do nothing to stop it; there is a sense of acceptance of this situation.

Such a portrayal of the near future is problematic in every respect. The body is viewed as a substance to be overcome rather than a living thing that can adapt to environmental conditions through technology; there is no solution to environmental destruction; there is no author and character diversity as in Solarpunk. It adopts a violent anarchist discourse, interpreting and applying extremist elements of punk. Although it aims to warn people about the effects of capitalism, it drives people to despair. This may be the reason why the genre's founding authors declared it dead in the late 1980s, because of its turning into a product of capitalism. Furthermore, with the misfit protagonist scheme, (to support their anarchist attitude, the authors prefer to choose people who have been marginalized by society and the system), the contributions made by the authors to technological developments (such as Gibson's

cyberspace), hacker ethics, and the cyborg figure which focuses on the fluidity of the body, Cyberpunk could have been a very promising subgenre.

Perhaps the most important of the mistakes is that the diversity of authors within the genre is limited mostly to white male authors; therefore, over time it has been turned into “a vehicle for adolescent male power fantasies” (Lavigne, 2008: 11). Although Cyberpunk deals with issues of importance, it can never fully engage with them because of the limited scope of its characters. These issues, such as the impact of capitalism, are, however, global, and affecting everyone, have long been protested by many groups worldwide. These groups were gathered under movements such as feminism, ecology, sexual liberation, and civil rights. Of course, keeping these people out of subgenre’s counter politics does not bring success. The flaw of Cyberpunk is that it focuses on individual action in situations that require collective action. That is why the 1990s are important because, soon after its founding authors declared the subgenre’s death, Cyberpunk was reborn as Post-Cyberpunk, and many of its dynamics began to shift with the proliferation of female writers. Women authors shifted their focus to the relationship between women and technology, ecology, queer rights, and family, and they incorporated more spiritualism and mythological elements into their writings. They criticized religious institutions, the government, family structure, and environmental conditions. Although environmental decay and pollution still exist in these new narratives, the biggest difference with the Cyberpunk of the eighties is that the authors and characters are not indifferent to this situation. They draw attention to the fact that the disappearance of the sense of community, as well as the increasing value placed on individualism, has played a significant role in the formation of these urban eco-wastelands (Lavigne, 2008: 153-5). Furthermore, they deconstruct gender roles by using the potentials of the cyborg figure and the misfit protagonist scheme. Modifications that demonstrate the fluidity of the body and creations such as clones, cyborgs, and replicas, as well as the variability of spaces such as cyberspace and virtual reality, are especially promising for queer theory, just as the trans sisters Wachowskis use of *The Matrix*’s a trans metaphor. However, the genre is still not fully inclusive, and there are issues with how certain groups are portrayed. The subgenre “lacks input from authors of multicultural or lower class affiliation” (Lavigne, 2008: 288) because it still cannot get rid of its old schemes especially.

Many notable assessments of this situation have been made by authors of various races and ethnic groups. For example, according to Isiah Lavender (2020: 308), the reason for the lack of racial diversity in Cyberpunk and the inaccurate definitions of non-white people is a result of its “color-blindness” and “the digital divide.” These two terms imply that people of color are not thought to be capable of dealing with particularly advanced technology. As previously stated, this school of thought arose as a result of Social Darwinism and continues to this day. In order to deal with these thought systems and discourses, Africans come up with new narratives such as Afrocyberpunk and adapt critical race theory to Cyberpunk, while Indigenous people create their own “alterNative” futures (Lenhardt, 2020: 350). If we remember that the word punk originally belongs to Native Americans, it is not wrong for Native Americans to describe themselves as “original natives of the web,” “warriors with keyboards,” and “Indigenous cyberpunks” (Lenhardt, 2020: 345).

Another racial influence group in Cyberpunk hails from Japan and other East Asian countries. As Alexandra Mjöll Young emphasizes, Cyberpunk narratives with Asian influences are not always positive and frequently reflect The Yellow Peril, a type of xenophobia. The term is used to describe Westerners’ fear of being destroyed by East Asia. She argues that the “West’s attraction to the East is merely a new form of Saidian Orientalism, known as techno-orientalism” (2014: 2). Techno-orientalism is also a result of Westerners’ fear of the East’s technological developments and the possibility of falling under their hegemony at any time. As a result, these anxieties are manifested as Japanese businesspeople in positions of power in large corporations or as yakuza fight scenes in the narratives. Yellow peril is also manifested in authors’ projecting the negative experiences in the Western world to Asian countries. By using neon Japanese and Chinese signs, depicting filthy and narrow sushi restaurants that fill the streets of the city along with crowded Asian people walking on the same streets, authors can sometimes show the Western country where the narrative takes place as being invaded by Asian culture. In this way, the problems encountered are presented as if they belong to or are caused by these Others. Young (2014: 5) also emphasizes another important point that is related to the digital divide. While white males can directly connect to any technological product, use it, and navigate areas such as cyberspace as they please, other people of color are shown to be unable to do so. These

technological products and fields, particularly artificial intelligence, are always represented by hypersexualized female voices when they are personified. Therefore, technology is not only racialized but gendered under the control of white men and their sexist discourse. As a result, it is clear that numerous issues in Cyberpunk must be addressed and changed to be a narrative that can provide solutions to today's problems.

2.1.3. Steampunk

The word Steampunk was coined in 1987 by K.W. Jeter as “a playful alteration of cyberpunk” (Nevins, 2020, 64). Steampunk consists of retrofuturistic narratives influenced by the works of authors such as Jules Verne and of periods such as the Victorian Era, combining elements of gothic romance, alternative history telling, and fantasy. The subgenre is formulated by John Coulthart as “STEAM PUNK = Mad Scientist Inventor [invention (steam x airship or metal man/baroque stylings) x (pseudo) Victorian setting] + progressive or reactionary politics x adventure plot” (Vandermeer, 2011: 9). For further understanding of the subgenre, it is also helpful to look at which aspects are highlighted by Amy J. Elias. She addresses some of the key elements, such as the influence of Western cowboy stories, the fetishization of old technology, and the discourse of British colonial and American frontier periods (2015: 206-7). The combination of all these elements created and shaped the Steampunk narratives.

For further analysis of the subgenre, Jess Nevins, another author like Elias, divides the development of the subgenre into three phases: Formative Phase (the nineteenth century to the late twentieth century), Establishment Phase (the period between 1996 and 2008), and Revolutionary Phase (the period after 2008). The first two phases are made up of narratives created under white male hegemony. The reasons for this include the genre's inspiration from Victorian England, authors such as Jules Verne and H.G. Wells, the American Wild West, and even dime novels that are known as Edisonade. On the one hand choosing the Victorian Era as the time makes the events such as racism, sexism, the rapid development of technology, and the rise of capitalism the main subjects of the narratives. On the other hand, the didactic technological descriptions of authors such as Verne are blended with the positivism of the inventor

young boy who defeats the foreign invaders/enemies in Edisonade dime novels. The main purpose of Steampunk, by going back to the period that can be considered as the starting point of social injustices and environmental destruction, that is, to the past, is to re-evaluate these situations, write alternative historiography, re-interpret the relationship of people with technology with a positive perspective, therefore, re-interpret the present and the future. However, because of the periods that inspired the subgenre and the limited variety of authors in its early years, it was unable to be critical and fulfill its purpose. In other words, it could not escape from the dominant discourse of sci-fi, just like Cyberpunk. For a long time narratives were just whitewashed descriptions of an ideal Victorian past.

However, generalizing would be wrong, as it would be unfair to its great potential and would ignore its positive aspects. Unlike Cyberpunk, Steampunk has a more positive discourse because it is driven by the excitement of people meeting and being affected by technology during the Industrial Revolution. Old technologies are revered in almost a fetishistic manner. As a reaction to modernism, this subgenre emphasizes machines that live, work, make noise, and even die when the time comes, as opposed to modern, incomprehensible, sleek-edged technologies. It creates a similarity between machines and humans in this way, and it aims to break down the hierarchical structure in science and technology by making the machine more understandable. When combined with DIY ethics, this desire transforms everyone into a mechanic and maker. In this way, the point is made that modern technology is unsustainable in every way. In response to industrialization, factorization, and capitalism, everything in Steampunk is recycled, repaired, and personalized. Focusing on the evolution of history and changing the relationship between humans and machines are key elements of the genre's punk attitude.

Steampunks' retrofuturist attitude, which is a technique for finding solutions to current problems, stems from their "postmodern anxieties about disembodiment, posthumanism, and a perceived lack of authenticity in the age of mass-produced commodities" (Esser, 2019: 152). They believe that problems can only be solved by combining the optimism of the past with the awareness and perspective of the present. In other words, they attempt to create an alternative perspective that disrupts the flow of history by selecting and blending different perspectives from various historical

periods. However, it should be noted, that this whole retrofuturistic tendency can often manifest itself as escapism and turn into being stuck in the past rather than saving the future with the past.

In fact, such a postmodern movement, of course, can not achieve success only with the contribution of a certain group of people, just like in Cyberpunk. In order to elicit a genuine punk attitude, multicultural and multinational participation is required. For this reason, during the Revolutionary Phase, which coincided with the emergence of Solarpunk, Steampunk began to reveal its true challenging potential by adopting a new anti-imperialist, egalitarian, and anti-racist discourse. Monique Poirier's Native American scientist character is an example of this (Pho, 2016: 128). Poirier, like other people of color, noticed a lack of racial diversity in Steampunk. Most people still consider indigenous people to be primitive, that is, technologically undeveloped, prior to the arrival of Europeans. Few people can think, imagine, or accept otherwise. However, Native Americans already had the technology and it was completely environmentally friendly. Nature, for them, is the technology. Along with Poirier's techniques and characters, another challenging perspective that has been brought into a subgenre is Steamfunk, which is focusing on the African culture and aims to solve problems such as slavery and racism.

The issue of prostheses and disability, which are directly related to technology, is perhaps the most important point to mention about this subgenre. Prostheses, as well as some assistive technologies and machines, such as the "steam-powered wheelchair" and "steam arm," are widely used in the Steampunk movement and its narratives (Crowther, 2016: 74-5). Although these have become part of popular culture over time, many people ignore or overlook their connection to disability. The reason why prostheses are so intertwined with Steampunk is that they are a product of the nineteenth century that inspired the movement itself.

Loss of limbs as a result of industrialization and wars was humiliating, especially among Victorians. People were excluded by society and even confined to sanatoriums. Also, having a prosthesis was not an option for everyone due to class and financial constraints. At the time, disability was only addressed physically, and any physical deficiency of a person meant that he (because the ones who lost their limbs were males) was not a useful member of society. The paradox that emerged here was

as follows: people suffered physical losses as a result of technological advancement, but these physical losses were also corrected by technology again. While humans were part of factories and machines, it was also true to say the opposite. The entire society was turning into a hybrid entity. This resulted in a closer relationship between humans and technology. Capitalism also played a role in this dynamic. The general expectation was that there should be standardization at work and that the body should be standardized in the same direction. People began to be regarded as robots. However, Steampunk believes that by being aware of all of this, the era's negative discourse about disability can be changed.

When prostheses and other assistive technologies are used to make disability visible rather than to fix a deficiency, Steampunk's deconstructive structure is activated. Because of Steampunk's treatment of the machine as a living being, and even its humanization of every part of it, technological creations become a natural part of the body. Prostheses, which are normally designed to be as simple and unobtrusive as possible, are romanticized, embellished, and polished in Steampunk. In fact, they were found by many to be erotic, which stems from Steampunk's tendency to fetishize technology and machinery. They make their presence known by squeaking and making a lot of noise. Therefore, "steampunk emphasizes the malleability of the body and its potential to be enhanced and improved" (Crowther, 2016: 87-8). In this case, the body is seen as a living thing that can adapt rather than something to be overcome. As Crowther emphasizes (2016: 91) wheelchair accessibility is required for any Steampunk revolution, which again indicates the subgenre's sensibility about disability. Thus, the subgenre which has overcome the patterns and limitations of its early phases is on the way to being all-inclusive because, thanks to its punk attitude, it has adopted non-conformity as a principle.

Steampunk has greatly influenced Solarpunk in many ways because of its positivity, DIY ethics, emphasis on sustainability, and deconstructive structure. However, because of misinterpretation, being influenced by the periods it should criticize, and having a limited number of writers for a long time, it has not been able to offer an adequate and effective solution to today's problems.

2.1.4. Dieselpunk

Before moving on to Solarpunk, the last subgenre to be mentioned is Dieselpunk, which emerged when Lewis Pollak coined the term in 2001. Dieselpunk will be mentioned in this thesis because it is claimed in some academic studies and other non-academic sources that it has an impact on Solarpunk, in addition to Steampunk and Cyberpunk. However, that is an incorrect assessment, because this retrofuturistic subgenre, which focuses on wartime periods, differs significantly from Solarpunk in many ways. However, it is still necessary to investigate this subgenre, which emerged around the same time as Solarpunk. Because comparing and analyzing both of them can help us understand two different responses of people to current problems in contemporary times. On the one hand, there is still a retrofuturist tendency, especially in the West, and on the other hand, a hopeful attitude towards the future is displayed in countries such as Brazil.

The subgenre, Dieselpunk, was influenced by the Interbellum Era, the period between WWI and WWII, and sometimes even the Cold War Era. The period's energy sources such as diesel and petroleum, war technologies, airplanes, zeppelins, skyscrapers, massive sculptures that make the presence and power of totalitarian regimes felt, and modern life aesthetics are blended with fantasy, pulp fiction, and noir narratives. There is also a huge emphasis on patriotism, a theme that results from the wartime periods. This subgenre, a hybrid of Cyberpunk and Steampunk, employs alternative historiography through the use of anachronism.

The uncanny and anxious atmosphere created by the war years, damaged nature and structures, a sky full of dirt and smoke from working machines, the paranoia of WWII, and the pressure and restriction created by totalitarian regimes with the help of technology form the foundation of the narratives. Even though there has not been enough research and analysis on it, works that may belong to this subgenre have been written for a long time. Along with literary examples such as *The Man in the High Castle* (1962), and *Fatherland* (1992), visual narratives such as *Brazil* (1985), *Sucker Punch* (2011), and *Sky Captain and the World of Tomorrow* (2014) can be cited, as well.

Dieselpunk, according to Larry Amyett Jr (2011: 10-11), is comprised of three major elements: Decodance, Contemporary, and Punk. What is meant by Decodance is that Dieselpunk's narratives are heavily influenced by the 1920s and 1930s. This epoch is defined by Art Deco's aesthetics as well as its philosophy. Art Deco, which emerged as an antidote to Art Nouveau and defended modernism, has sharp lines rather than curved ones, and its inspiration is geometry rather than plants and nature. Shiny metals such as chromium, iron, and copper are used as the main materials. While the massive buildings that comprise the metropolises are adorned with this aesthetic, the protagonists of Dieselpunk walking around in the city lights are gangsters, detectives, and flappers who are frequently seen alongside them. These modern people (who are generally Americans) truly represent Western decadence, having fun with jazz music and using the abundance that comes after the war for their personal pleasures. Therefore, New York is generally preferred as the setting (Ottens, 2011: 8). "Dieselpunk society knows that all its wealth and prosperity is due to the machine and the human effort to control it, but it also knows that this sense of tranquility is only an illusion that they themselves have created to try to resolve their material and moral losses" (Cabello Gallego, 2015: 18). In other words, these people's swing dance moves are simply an expression of their desire to shake off all the dirt that has accumulated on their suits and dresses as a result of war.

Although Dieselpunk is associated with the muddy and greasy streets of glowing cities under gray skies of the past, another important component of this subgenre is Contemporary. It, like Steampunk, attempts to view the past through the lens of the present. Its goal is not to recreate the past in its entirety and keep it alive. Today's awareness, and even technological developments, are carried back in time, attempting to create a different history, present, and future.

Punk is the final component. Its poststructuralist nature and countercultural attitude allow the subgenre to change the past. It alters the past relationship between humans and technology. Anyone, thanks to the punk attitude, can create their own Dieselpunk, but there is one thing to keep in mind. People create these retrofuturistic fictions not for themselves, but for the society they live in by aiming to initiate a movement for change.

The main issues examined in this subgenre are people's overconfidence in technology, their hope, and the effect of technology on their psyche, and based on this, two different narrative styles develop in Dieselpunk with two different perspectives: Ottensian and Piecraftian. Both narrative methods are intended to exaggerate the realities; one focuses on the prosperity of the war periods that only certain people have taken advantage of, while the other takes a more pessimistic stance, emphasizing the destruction that wars bring to humanity.

Ottensian Dieselpunk, a term coined by Nick Ottens, is positive and even utopian at times. It covers the period before WWII. It believes wholeheartedly in technology and progress. Emphasis is placed on the enthusiasm for rebirth and successive changes after WWI. It is the era of the Great Gatsbys, who are dazzled by opulence, consume and act recklessly, and feel empowered following the war's victory (of course this is an American perspective). In Ottensian narratives, humor can be found frequently. The radical changes that society has gone through, from clothing to politics, are a great source of inspiration. Post-apocalyptic images or negativities may still appear in these narratives, but the hope of victory and belief in one's ability to win and succeed gives this narrative a positive tone. Protagonists are typically heroic men who are both physically and morally strong. Fearless, daring, and on a mission to save the day, these characters are people who can still be directly affected by the events around them. They can, for example, suffer from government pressure or can experience an inability to adapt to modernity (Piecraft, 2009: 18-20).

Piecraftian narrative, on the other hand, focuses on the period after WWII and is much more pessimistic. Mr. Piecraft, who contributed to the subgenre's development through his articles and writings in the online publication *Gatehouse Gazette*, clarifies that Piecraftian Dieselpunk focuses on war and its effects. Hope fades in the face of fascism, environmental pollution, the difficulties brought on by the Great Depression, and the transformation of technology into a threat. Despair has replaced excitement, and the stories are told in a satirical tone.

Due to noir elements' predominance in the narratives, individuals' inner and outer worlds are dominated by madness and chaos. People are haunted by their past. Technology is either depicted as primitive wreckage or as a highly developed element

that oppresses people's lives. Of course, in such a narrative, the protagonist has changed from being heroic to anti-heroic.

Whereas the 'Ottensian' hero reflected the traits of a steampunk identity of adventure and ingenuity, the 'Piecrafter' character projects a more cyberpunk antihero sentimentality one of hopelessness, deep cynicism, sarcasm, and personal turmoil in accepting his circumstances, due to a random event that has marked a considerable change in his monotonous lifestyle. (Piecrafter, 2009: 19)

In this case, the punk attitude emerges in a more nihilistic and violent way in this lone male protagonist.

In conclusion, despite their great potential, these three subgenres were unable to solve the majority of the problems they criticized due to a lack of an environmentalist and egalitarian philosophy. While Cyberpunk attempts to criticize capitalism, it eventually becomes a product of capitalism, offers individual solutions to problems that require collective action, fuels racism and sexism, and can not progress beyond being a dystopian narrative because of its environmental insensitivity and distrust of technology. Because of the attitude that constantly sees the body as a worthless matter, constantly battering it with substances such as drugs, and the desire of overcoming and transcending it, the value given to humans, therefore, the value given to the environment, is decreasing. Perhaps the most dangerous aspect is that this dystopian future claims to happen in the not-too-distant future, therefore, driving people to hopelessness and sometimes violence. Because nihilism emerges and leads people to purposelessness. Nonetheless, Solarpunk owes a great deal to this subgenre. Above all, it borrowed Cyberpunk's -punk suffix and its anarchist manner. In addition, elements of the Cyberpunk narrative, such as noir atmosphere or hacker ethics, also can be found in most of the texts other than the transitional one, *Solarpunk: Ecological and Fantastical Stories in a Sustainable World* (2014).

Steampunk, on the other hand, has had a significant influence on Solarpunk, with its Art Nouveau aesthetic, DIY ethics, utopian thinking, positive attitude toward machines and technology, transforming everyone into an artist, and its strong emphasis on sustainability. In fact, there are articles and arguments in most academic and non-academic sources claiming that Solarpunk is more influenced by Steampunk than Cyberpunk. However, while examining the roots of today's problems and going back

in history, it sticks in there and becomes a product of the period it criticizes. With its past-focused nature and nostalgia, there is a risk of turning people into escapists. This results in people finding comfort in the past and undermines the motivation needed to change today's problems. Its passion for old technology can prevent people to realize the promises of modern technology. Focusing on old technologies rather than making modern technology environmentally friendly and sustainable, as well as making it understandable to all, stifles future solution proposals. Using authors like Jules Verne, and works such as Edisonade dime novels as examples, this subgenre could not escape the dominant masculine language of sci-fi. Such lacks would have been noticed by a large enough audience that a new punk subgenre, Solarpunk, would have had to be born at the end of the 2000s.

Finally, another retrofuturist subgenre, Dieselpunk, is a rather inadequate narrative due to its emphasis on the wars and wartimes, patriotic sentiments, which in fact fuel racism, and its ability to only focus on Americans who enjoy wealth and social changes in moral decay when it comes to being a positive narrative. This subgenre, which frequently depicts a highly dystopian and post-apocalyptic future, celebrates and focuses on war-related themes such as heroic male protagonists, destruction, war technologies, power, insecurity, totalitarian regimes, colonialism, and Western governments' victories. Therefore, it is far from being egalitarian, constructive, environmentalist, curative, and hopeful. It also demonstrates that, at the dawn of the twenty-first century, dystopian narratives can't be abandoned, solutions continue to be sought in past, and masculine language and themes still dominate sci-fi, therefore, indirectly, it also emphasizes how urgent the need for the incorporation of Ecofeminist philosophy into sci-fi, particularly into punk subgenres.

2.2. SOLARPUNK

Solarpunk is the ray of sunshine that sci-fi, which has recently been plagued by dystopias, has long required. It is a collective call and protest of people who are tired of negative future predictions and want to take action to destroy the prevailing atmosphere of hopelessness. That is why, after being coined by an anonymous blogger in 2008, the term Solarpunk has quickly become a movement and literary subgenre.

Since then, people all over the world have claimed to be Solarpunks because “the only other options are denial or despair” (The Solarpunk Community, n.d.). As Sarena Ulibarri states, in general definition, Solarpunk is:

A movement of artists, writers, and activists, interested in changing the trajectory of our world for the better as a genre of science fiction... Solarpunk stories do not always show the specific solutions that lead to a better world, but they do always strive to show that better futures are possible. (Ulibarri et al., 2021)

Therefore, in order to be considered as Solarpunk, any act or narrative should basically have the following components: hope, optimism, climate change issues, innovation, art, community, and counterculture. Solarpunk, like Steampunk and Dieselpunk, is a movement that emerged on the internet and experienced a period of stagnation between 2008 and 2014. Even though many people have created narratives with these components, they could not be gathered under a single roof. According to Adam Flynn, the most important reason for this was that this subgenre did not yet have an aesthetic that these forward-looking narratives could be formed around. This aesthetic was created by Olivia Louise in a blog post in 2014, later became accepted by Solarpunks, and even included in the manifesto. Therefore, Solarpunk narratives shape around the followings: “1800s age-of-sail/frontier living (but with more bicycles), creative reuse of existing infrastructure (sometimes post-apocalyptic, sometimes present-weird), appropriate technology, Art Nouveau, Hayao Miyazaki, Jugaad-style innovation from the non-Western World, and high-tech backends with simple, elegant outputs” (The Solarpunk Community, n.d.).

One of the most important aspects of Solarpunk, like its aesthetics, is its diversity in every area. The first of these areas is the philosophy and mentality of Solarpunk. Feminism, Ecology, Ecofeminism, Queer Studies, Disability Studies, Punk, BIPOC, Afrofuturism, Indigenous Futurism, Arts and Crafts Movement, and many more have an impact on Solarpunk narratives. In this way, a polyphonic narrative is created by displaying the distinct characteristics of numerous different points of view and resistances. This diversity of thought, of course, results in a diversity of authors. Most the anthologies gather authors from all over the world, therefore, many different languages, religions, races, ethnic groups, genders, and

sexual identities are represented in the narratives. As a result, the reader sees that there is not just one way to become a Solarpunk or one future, but a variety of ways, predictions, and solutions. Representation is also an important issue that is connected with diversity. One of the most important goals of these narratives is to increase the visibility and hearing of marginalized voices that are oppressed by the white and patriarchal discourse.

It is also necessary to mention the diversity of species. In the stories, there are not only humans but also various animals and plants that have a close relationship with technology at times. All these are very effective ways of destroying the world's dominant dualist, patriarchal, hierarchal, and discriminatory discourse. Therefore, with all these representations, each of the Solarpunk anthologies becomes a microcosmic reflection of our world with its multinational and multispecies structure.

In addition, a variety of authors also diverts readers' attention away from familiar Western locations. In every anthology, the reader travels geographically from one narrative to the next. The setting does not have to be New York or London anymore. It is not required to be a city or a metropolis. The story can be set in rural India, a floating laboratory in the middle of a post-apocalyptic world, or the historic streets of Italy. As a result, the readers' perspectives broaden, and they are reminded of how global the problems they face are.

When it comes to Solarpunk's diversity, the term pluriverse, which Juan Reina-Rozo emphasized in his article, should be mentioned and investigated further, because, as he stated, this concept can make a significant contribution to the movement and narratives (2021: 62). Academics and critics from the Southern Hemisphere, the Third World, or other exploited countries are the most likely to use this concept. However, the term was first coined by a German theologian named Franz Hinkelammert, and its use was widespread by a philosopher named Enrique Dussel and became popular with the 1994 Zapatista Movement (Mignolo, 2018: xi). It is acknowledged in this concept, which can be evaluated both ontologically and epistemologically, that more than one world exists at the same time, that there is more than one way of knowing, and that there is more than one way of being. It is an anti-thesis of the term universe. As Arturo Escobar emphasizes, in pluriverse, many worlds can fit into a single world. The first

thing to realize in such a situation is that reality is not single. Because it is a social construction.

Aside from this epistemological point of view, there are actually three worlds, according to Amaya Querejazu, if we look at it from an ontological standpoint. These worlds are natural, human, and spiritual, and they are interconnected and can coexist (2016: 3). Being aware of and accepting these will not only increase tolerance for difference and diversity but will also drastically alter everyone's perspective about reality and the world. In this case, discrimination is eliminated. As a result, there are no dichotomies, therefore, domination, superiority, exploitation, reductionism, and other related concepts and actions have no place, as well. These are products of the universe and it "is always imperial and war driven" (Mignolo, 2018: xii). Therefore "a pluriversal world overcomes patriarchal attitudes, racism, casteism, and other forms of discrimination" by indicating that there are various ways of perceiving, experiencing, learning, and being in the world (Kothari et al., 2019: xxviii).

Concepts such as the universe, universality, and single reality, according to academics and critics who defend pluriverse, originated from Western-based thought systems, discourses, and narratives. In anthropocentric philosophies, reality is a concept separated from the individual and can only be learned and experienced through reason, logic, and science. Emotions and intuitions along with science, social structure, politics, and everything else that does not fit Western patterns are therefore excluded. This point of view, of course, also may have a place in the pluriverse. What is opposed here is not the existence of such an understanding, but its attempt to dominate over others.

Pluriverse has the potential to liberate people by deconstructing all of the patterns, categories, and systems that limit and dominate people today. Simply put, the reality of a plant and its mode of existence differ from those of humans, and even realizing this is enough to call reality into question. Movements like feminism and critical race theory are then part of the pluriverse. Because they show that there are other experiences around the world other than the white male experience. Solarpunk also can be seen as a movement and narrative that supports the concept of pluriverse through its various perspectives and lifestyles, as well as its structure that encourages diversity.

Furthermore, in pluriverse, as in Solarpunk, “knowing is loving and working is creating,” and it encourages being connected, being a caretaker rather than a master, respecting all living beings, and remembering the connection with nature by realizing that there are other worlds, beings, and realities besides ours. (Querejazu, 2016: 10).

Community, aside from diversity, is another aspect of Solarpunk. The importance and value placed on being an individual rather than individualism is the key to how so many different people act in harmony within the community (Johnson, 2020). Being an individual yet still acting together stems from the punk attitude of the genre, and if one remembers, punk is eclectic, open, and versatile, as David Beer (2014) points out. As a result, the narratives’ discourse varies in relation to the punk attitude, as well. Solarpunk narratives, which express their opinion on political issues directly or indirectly, are written with a challenging discourse, namely anti-authoritarian, anti-capitalist, anti-racist, anti-sexist, decolonial, postcolonial, deconstructive, and eco-centric.

Solarpunk’s punk demeanor stems from its decision to take the opposite path to everyone else. It draws attention to issues that most people would rather ignore. It encourages people to think critically, particularly about social and environmental issues. This punk attitude fits perfectly with the critical thinking of ecofeminism because the points they draw attention to are the same and the way they do it is very similar.

Solarpunk brings together all of society’s outcasts and marginals. It seeks to create a different kind of social progress than the mainstream through the communities it establishes. Because, according to Solarpunk and contrary to popular belief, the goal of social progress is not to drive societies to consume and destroy through the aid of technological advancements but to encourage them to be constructive, generative, and gentle. As William Schuller (2019: 14) summarizes, moving away from capitalism and hierarchy and toward a caring, decentralized system of interconnected communities, while leaving room for alternative types of social organizations and groupings, is what social progress entails. Physical and technological development is second only to social and psychological development.

Solarpunk also understands that societies must be dynamic to initiate and sustain this desired social evolution and development. As a result, the theme of

realization and overcoming existing problems pervades each story. Authors create critical utopias and societies, just like ecofeminist sci-fi writers, that are “ever-evolving and ever-problem-solving” as a result of this attitude (Razaghi, 2019: 41). At this point, Solarpunk’s choice of short stories as the dominant writing style is also an issue that should be mentioned. In order to better understand their structure, one can consider each story as a snapshot. Therefore, as Tatjana Razaghi (2019) emphasizes, they are incomplete in many respects. Characters, locations, and even events are not given in their entirety to the reader. There is no clear beginning or end. In this case, the reader turns into a witness of a scene or sequence of scenes from this flow of evolving utopias. Readers are actually encouraged to reflect on these uncompleted stories. In this way, the desired dynamism is provided in narratives and later in real life by encouraging people to be not just a witness but a part of this flow.

The Solarpunk philosophy is concerned with the interdependence of social injustice and environmental destruction, just like ecofeminism does. Both problems, it believes, are solvable, particularly through the use of sustainable technologies and environmentally friendly natural energy resources. For example, using the Sun as an energy source instead of fossil fuels would be more democratic and healthier for all living things. Because the Sun is “decentralized and egalitarian” by nature (Williams, 2019: 5). Thus, changing the energy source will inevitably result in a shift in social relations. In order to understand this claim better, one should focus on the term infrastructure. Because Solarpunks’ most effective form of resistance is infrastructure (Flynn, 2014). Of course, this term should be evaluated holistically and be considered as a kind of network among things. Solarpunk sees the interconnectedness of everything in the world. It would not be incorrect to say that this subgenre, which places such a high value on and is inspired by nature, derives this understanding from trees and plants, which it employs as a common motif and even character in its narratives. Plants’ roots are the most important part of their infrastructure. They serve as a means of communication and energy transference. The better the transfer of nutrients and energy, the stronger and healthier the roots and the plants. As a result, as an important part of the ecosystem on Earth, plants turn into a life source for many creatures. In other words, the health and proper operation of plant infrastructures possess enormous power and have the potential to drastically alter everything. That is

why Solarpunk alters all types of infrastructures (networks) by altering energy sources and how they are used. The change in the relationship between people, nature, and technology will have a huge impact on people's relationships with one another, as well. In this way, class issues, sexism, racism, and other similar issues can be addressed and solved.

When compared to previous subgenres, it is understandable that subgenres such as Steampunk, which focuses on steam and coal energy, and Dieselpunk, which is based on fuels such as gasoline and diesel, could not provide solutions to today's problems. These energies, which are centralized, entirely focused on consumption rather than production and can be obtained only through the constant exploitation of a specific group of people, harm both nature and human relations. Therefore infrastructure causes inequalities. Although Cyberpunk does not focus on a specific energy source, its high-tech, low-life discourse, and intense capitalism influence also lead its followers and readers, who have become consumers themselves, to a stalemate.

If a comparison between Solarpunk which focuses on a "low carbon, high life" instead and Cyberpunk is made, Cyber can be considered the grumpy and punk brother, while Solar can be considered the hippie and activist sister (Johnson, 2020). As seen in this comparison, the effort to give this subgenre a feminine personality while personifying it stems from the values it advocates, such as equality, love, and productivity, and it reminds once again how intense its ecofeminist aspect is. At this point a name analysis would be appropriate to better realize this undermined and neglected side of the subgenre.

Apart from air and water, the Sun is one of the most important energy sources, and its contribution to the movement and narratives is not only physical but also symbolic. The name of the subgenre has two components: solar and punk. The solar part represents hope, joy, utopia, warmth, brightness, nourishment, optimism, goodness, clarity, security, and unity. However, a more detailed examination of this image, which serves as the foundation of Solarpunk sensibilities, is required to better understand Solarpunk's challenge to masculine sci-fi (mostly written by white male authors).

The Sun has always played a significant role in human history. This astronomical formation, which has been worshiped by many civilizations, is now an

important energy source that can be used in many places thanks to modern technology. It is also an important symbolism on the flags of many countries, from Argentina to Japan. Although the meanings assigned to it, as well as the genders, have changed over time, its significance to humanity has not.

When the dynamics of the dominant masculine/feminine dualism are examined, it is clear that, on the one side, they are based on mythological narratives. The masculine is associated with logic, reason, power, authority, and science. The connection to the Earth and physicality is constantly attempted to be severed. Therefore, the head, the body part that is close to the sky and contains the brain, is generally associated with masculinity. When it comes to mythological narratives the Sun is accepted as a man, as well. He is the father, the God, the giver of trust, and the spreader of knowledge. This imagery is most common in Western mythologies such as Greek. Helios and Apollo, for example, appear as young white males who enlighten the world and bring to the people “music, poetry, mathematics, medicine, logic, and reason” (Scherrer, n.d.). In addition, in Christianity, Jesus is identified with the Sun, as well. Therefore, deductively, it can be said that if science is the domain of the Sun God, sci-fi must be as well. This could explain why male authors predominate in this genre and play an important role in its development. Because, like scientists, they felt obligated to spread the wisdom of this Sun God to society through narratives.

On the other hand, the feminine was associated with the Moon, and it was perceived as a dark, mysterious, feared force with a strong connection to the earthly, protecting, nurturing, but capable of killing when necessary. It is viewed as either a threat to be overcome, namely a witch, or a caring mother. Therefore various Moon Goddess figures emerged throughout history. With the expression of the Moon Goddess, who is the wife and at the same time sister of the Sun God, the inequality between men and women has deepened. But this narrative was not always like that. The Sun, contrary to popular belief, was originally a Goddess, particularly in Eastern cultures and mythologies. For example, in Japanese mythology, Amaterasu is the Sun Goddess who brings the light, and this narrative provides a nice contrast and alternative to the Genesis narrative of the Bible. For Aborigines, the Sun is a mother who gives life to the world. Again in the Inuit tribe in Greenland, the Sun is again a Goddess named Malina (Scherrer, n.d.). Of course, in such a case, the meanings attributed to

the Sun also change. The Sun becomes a mother archetype that brings everyone together, nurtures, protects, represents vitality, and brings fertility.

So, how did the Sun go from being a warm mother figure to a fierce, authoritarian father figure of today? According to Andrea Pilar Valencia Rivero (2020: 8), this can be explained by the Kurgan Hypothesis. While a peaceful and matriarchal order dominated the geographical region now known as Europe approximately 5000 years ago, the conflict between two different thought systems began due to the continuous invasions of a patriarchal and warrior civilization. Following this, the mentality of dominating the people with this patriarchal civilization's expansionist, invasive, and controlling structure began to spread. The discourses used and the symbols emphasized by them are the most important assistants of colonization and suppression policy. Before them, the Sun, Moon, and Stars were all linked to a general concept of Goddess, and she was a very powerful image because she embodied attributes such as life, death, renewal, and regeneration. The patriarchal communities began to disrupt the unity and harmony both in the sky and on the ground, believing that it is dangerous for their existence. The unity between the Sun and the Moon is divided, they turned into a man and a woman. Therefore, following this, a distinction began to emerge within the communities based on the logic of as above, so below. This was the power of "mythmaking propaganda" (Rivero, 2020: 19). As Patricia Monaghan (1990: 21) states, "since approximately 500 B.C., both art and scholarship in the West have emphasized – often in strident tones – the male sun". So the Sun has turned into a political tool. Western civilizations spread their power-centered ideologies over the Sun God-Father symbol, formed Fatherlands, and declared their citizens Patriots.

Thus, if discourses, symbols, and narratives influenced individuals, communities, and world history, recognizing and properly utilizing this power and potential can change the future. At this point, Solarpunk challenges the patriarchal discourse attributed to the Sun, resurrects the old matriarchal Sun goddess, and transforms sci-fi from being solely the product of Apollo into the product of Goddesses such as Amaterasu, Arinna, and Sunna. That is why Solarpunk is a community-based narrative and movement that fosters productivity and creativity. It is diverse, hopeful, optimistic, unifying, values Earth and every creature that lives on, and is based on

universal love. For this reason, it would not be incorrect to see this subgenre as an ecofeminist ray of light emerging from the darkness of male-dominated sci-fi in the twenty-first century.

Solarpunk, while resurrecting the Sun Goddess, makes some adjustments, critically evaluates it, and creates its own Goddess image, Solaria Grande, in its own unique way:

Metres away from her sat Solaria Grande, her brown skin dusted with holographic flecks, her frohawk teased with grey and threaded with light-emitting filaments. Cybernetic contacts made her irises a sigil of golden circuitry, and she looked every inch the ecological goddess who'd forced the desert into retreat. Her seed-planting drones had strafed the land with precisely mapped grasslands, scrub, and forests. Her educational programs and support networks had empowered communities to manage the natural regeneration of dormant vegetation systems. (Mok, 2018)

In *A Cyborg Manifesto* (2016), Donna Haraway states that she would rather be a cyborg than a goddess. Because she claims that gender norms can be challenged and changed as a result of cyborgs' deconstructive structure. On the contrary, without preferring one over the other, Solarpunk creates a cyborg goddess by fusing the two, celebrating the harmony of nature and technology, and the goddess' return to the realm of sci-fi. Therefore, Solarpunk breaks down the dichotomies of technology/nature, organic/inorganic, science/spirituality, and so on. D.K. Mok's brown-skinned cyborg Sun Goddess who uses technology to improve and enhance both herself and her surroundings, the fusion of mythology and technology, supports Arthur C. Clarke's statement of "any sufficiently advanced technology is indistinguishable from magic" as well. As she walks drones, like fairies, create flowers around her.

At this point, after name analysis, it is necessary to do some analysis on technology, which is an important element of Solarpunk, other than diversity, community, and punk. The subgenre recognizes how harmful and deceptive technology can be in the absence of an environmentally friendly and egalitarian philosophy and thinking. This subgenre does not exhibit the attitude of reverting to a pre-technological age, i.e. regression. Although such a regressive attitude can be seen in some stories or in real life, it is not preferred in light of the goal to be achieved. On

the contrary, modern and high technology is celebrated. It is attempted to harmonize technology with nature. Nature and people do not serve technology; rather, technology serves nature and people. Therefore, one of the most important goals of Solarpunk is to provide techno-optimistic solutions to environmental problems. Here, the most important role is played by renewable energy sources and environmentally friendly technologies. In fact, people preferred natural energy resources long before the use of energy types such as coal, gasoline, and nuclear energy. Wind energy, for example, has been used for five thousand years, while water has been used for energy production since 250 B.C. (Sørensen, 1991: 8).

Technology and science are interpreted as an extension of the self in Solarpunk. It is not an element that exists independently of or in opposition to people. Because as Tolga Yarman (2011: 931-2) indicates in his article, if we are a part of the universe, therefore nature, and the technology we produce should be and inevitably aligned with both us and Earth. In this case, technology that is out of sync with the world's and nature's cycles, that does not benefit people, and does not promote social evolution has no place in the narratives of this subgenre. In this direction, one of the techniques used by many authors is combining traditional methods with modern technology.

The value placed on the past in this subgenre manifests itself in how old techniques and methods can be evaluated in the modern era, rather than remaining an obsession as in Steampunk or Dieselpunk. Whereas in most of the punk subgenres that preceded it, modern technology has been something to be feared or rejected, in Solarpunk it is the opposite. But there is no unconditional support here. Because of its critical perspective, Solarpunk is aware of the pros and cons of modern technologies. As a result, dystopian situations that can arise from the misuse of technology, such as the first Brazilian anthology, appear frequently in the narratives.

Another aspect of Solarpunk's relationship with technology is the extent to which it imagines new technologies. The fantasy genre's influence on Solarpunk can manifest itself in its predictions and depictions. Some of the technologies and machines can't be invented in the near future. As a result, even though some of the authors are scientists, a didactic narrative in the manner of Jules Verne does not prevail. However, as Razaghi (2019: 21) states, people are not discouraged by realizing the impossibility of such technological and scientific productions in a short period.

Because what matters here is the narrative's positive and motivating tone. The main point that is emphasized is how valuable technology is as an auxiliary element for people and how intertwined it is with both individuals and society. Another reason for avoiding a didactic tone in the narratives is to introduce readers to the fields of science and technology. In this way, the hierarchical structure in science and technology is attempted to be destroyed, and it is made understandable to all and thus performable by all. This attitude and purpose are the same as those of Steampunk and, in particular, ecofeminism. In order to understand how all these and other themes and aspects of Solarpunk in common with ecofeminism manifest themselves in narratives, in the next chapter selected short stories from *Solarpunk: Ecological and Fantastical Stories in a Sustainable World* (2018), *Sunvault: Stories of Solarpunk and Eco-speculation* (2017), *Glass and Gardens: Solarpunk Summers* (2018), and *Multispecies Cities: Solarpunk Urban Futures* (2021) will be analyzed. In this way, it will be observed how the effect of Cyberpunk in Solarpunk narratives, especially in the beginning, gradually gave way to ecofeminism.

CHAPTER THREE

ANALYSIS OF SOLARPUNK FUTURES

3.1. SOCIETIES OF THE BRIGHT FUTURES

In this section, common themes in Solarpunk narratives will be analyzed to show how the values advocated by the movement and the issues that are opposed are stated.

3.1.1. Green Capitalism and Cyberpunk

When the first Solarpunk anthology was published in Portuguese as *Solarpunk: Histórias ecológicas e fantásticas em um mundo sustentável* in 2014, it was unexpectedly critical and harsh. This is because the anthology's authors are Brazilian, and as one of the leaders in the use of renewable energy, as stated in the preface of the book, they are attempting to warn the rest of the world. Their goal is to demonstrate that sustainability is not synonymous with the concept of utopia. Because if it is not combined with proper morality and mentality, it has the potential to turn into a threat such as Green Capitalism. Furthermore, because it is a transitional work, Cyberpunk elements such as noir, hard-boiled detective fiction, and gothic are abundant, as seen in anthologies published after this one. However, it should be noted that this impact gradually waned over time.

Elements such as mystery, death, and violence are included in the first anthology's narratives, as are racism, colonialism, and classism, demonstrating that renewable energies and technologies are meaningless without Solarpunk sensibility and they can't provide social equality. At this point, it is necessary to explain a little about Green Capitalism, which the anthology criticizes, and the concept related to it, Greenwashing. Green Capitalism is based on the belief that nature, all living creatures, that is, the ecosystem, has an economic value, therefore, it aims to reduce pollution of nature or damage to these living things. In other words, the primary motivation here is, once again, economic concerns. This type of capitalism, or environmentalism as it is proposed, views environmental pollution as a market failure. It defends that "nature

provides financial benefits to societies and that any damage to ecosystem function has an economic cost” (Scales, 2017: 2). This cost is being attempted to be determined either through a carbon tax or through methods such as cap-and-trade. However, neither can prevent pollution. Because the issue here is not preventing pollution caused by factories, but rather reducing it. Therefore, putting a monetary value on pollution is not an effective idea, because these values are frequently either kept low or completely rejected. In a capitalist system, the goal of factory owners is not to protect nature or society, but to increase their income and growth. In this case, there is no such thing as green or environmentalist capitalism. But there may be capitalism painted green.

Consumption, for example, is directly targeted because it is one of the most important components of capitalism. People’s environmental sensitivities are exploited, and strategies such as eco-labeling or organic farming are used to maintain consumption. When they direct people to organic products, they do not explain which species are destroyed and which groups are exploited in the mass production of these products that are offered to consumers. Another example is that to be environmentally friendly, a factory employs renewable and sustainable energy sources and technologies. But, once again, hypocritically, they either build these greed-based technological projects on cultural and historical heritage sites, such as geoglyphs or name these technologies after indigenous peoples’ mythologies (Reina-Rozo, 2021: 56). As a result, capitalism will never be green but greenwashed because of its profit-driven, competitive, and environmentally destructive nature. All it can do is worsen the existing issues and harm both nature and people.

Thus, the first short story to be analyzed in this direction is *Soylent Green is People!* (2018) by Carlos Orsi. The story has gothic and noir elements. It tells the investigation process of a detective who is hired by both a company called DNArt & Tech and the Church of the Puritans. On the one hand, Raul, an engineer whose life is intertwined with technology, is found dead in his car; on the other hand, his elderly and anti-technology mother, Albertina who is also a church member is missing. Sabrina, Raul’s lover and fiancée, hires the private detective and is a total femme fatale figure. She is a senior employee of DNArt & Tech and a woman who only acts by using her femininity according to her wishes. She is shown as a sexual object. The detective is constantly sexualizing her in his mind. Women’s position remains

unchanged in a future where technology and science are advanced and capable of even reprogramming genes. Also in this future, environmentally friendly technologies are used in many fields, such as biodigester tanks that convert soybean oil into fuel. However, technology is also used in many other, morally questionable areas, such as cloning, uploading of consciousness, and asexual human reproduction. The successive narrative of such technologies and renewable energy technologies at the beginning of the story actually serves as a foreshadowing of the problematic use of technology for the reader.

Therefore, the short story demonstrates that technologies and studies focused on renewable energy production with natural resources can actually go very wrong in the absence of morality and in the hand of big, greedy corporations. In the narrative, because of global warming and rising oil prices, the method of converting biomass to biofuel is being used as an energy source in a variety of fields, including transportation. Plants are the source of biomass in this case. They, however, have begun to fall short of meeting the increasing energy needs, necessitating the use of a new energy source, protein. Nitrogen pollution occurs during the process of converting protein into energy with the help of bacteria and yeast, and Raul develops the technology to eliminate this pollution. In this way, all kinds of organic waste, including animal carcasses and their parts not used in the slaughterhouse, will be made useful. This recycling logic is crooked in many ways. Of course, the detective is the first to notice this: “Raul was working on a process to extract biodiesel from animal protein. Human beings are animals. Albertina was a human being. You want me to draw a diagram?” (Orsi, 2018). After Raul and Sabrina killed his mother, by feeling guilt, Raul committed suicide by tossing her dead body into one of the biodigester tanks, allowing the gas produced during the fermentation process to fill his car and suffocate him.

In this case, it is understood that if this murder case had not occurred and had not been investigated by a detective, the technology company might have begun to use humans instead of animals for energy production. It is depicted as an unavoidable situation that consumerist societies eventually begin to consume themselves. In such a society, it is also shown that the people that are going to be consumed would be chosen from those who were thought to be of no benefit to society, such as Albertina. Because, according to Sabrina as a character representing the company, Albertina is a person

who obstructs both her personal wishes and the company's wishes in every way. She is not only a woman who requires Raul's care because she is elderly and disabled but also refuses to accept technological assistance to correct her disabilities because of her religion. The church does not allow any direct interference with the body, which is seen as a temple. Therefore, there is also a conflict between religion and technology, too. In conclusion, it is clearly demonstrated how the technology of converting plants into energy can easily become a tool of slaughter if sufficient ethical and moral values are not present.

Gary Johnson (2018) by Daniel I. Dutra is another short story that aims to warn its readers in the same context. The story is set in the early twentieth century and has a similar gothic atmosphere to *Frankenstein* (1818). In a lab on the ground floor of a church, Father Maura, a priest and scientist, is working on his discovery, bioelectrography. He can photograph people's souls using the machine he invented to prove the existence of spirits. In addition to Father's studies and experiments, American physicist and engineer James Paulsen, who later joined his research, also claims that there are multiple dimensions and that souls exist in one of them. At this point, the two's work complements each other, and they begin to collaborate.

However, it is realized that when the soul is transferred from one dimension to another, a tremendous amount of energy is released. During the experiment and photographing process, it is observed that this energy gradually increases as it moves from inanimate objects to living beings such as dogs. But, as the cost of this situation, they observe that the living thing rapidly ages during the process and eventually dies. At this point, they realize that the amount of energy that will emerge in the dimensional transfer of a person's soul can be very huge. According to Paulsen, this energy is revolutionary and has the potential to replace energy sources such as oil and coal, bringing wealth to both Father and himself. However, besides the lack of morality and ethics in this thought, he also suggests the use of blacks for energy production. The machine and its plans, therefore, are destroyed when Paulsen uses a young black boy named Dorival, and Father Maura sees a dream in which blacks in the future are reduced to fuel to move the metal organs of the city (Dutra, 2018).

The fact that two scientists use an animal and then a black child in their experiments is a criticism of scientific research's racist and speciesist attitude. Just like

in *Soylent* (2018) people who are excluded and not seen as useful by society are once again seen as a source of energy. But, in real life, capitalist countries already exploit the energy of the Third World people by employing them in the heavy production stages. The use of an African child as a test subject by the American scientist Paulsen is also a reference to the endless problems of racism and slavery in America. So much so that Father Maura received a revelation from the future about the potential scope of the racism problem if people like Paulsen's thinking persist. Minorities, marginals, and others can be used as fuel to keep whites' fast-paced lifestyles going, much like slaves did in the fields centuries ago and their economic contribution to white Americans' lives.

As seen in both stories, the technologies turn into murderous weapons in the hands of discriminatory and materialist mindsets. Because technology and science only serve the interests of a select few in these thought patterns that harm living things and nature. The disastrous consequences of a lack of Solarpunk and ecofeminist sensibility are clearly visible here. The dangers that may arise in the absence of these are also discussed in other short stories as well, such as *When Kingdoms Collide* (2018) by Telmo Marçal and *Sun in the Heart* (2018) by Roberta Spindler through body modification and genetic engineering.

In *When Kingdoms Collide* (2018) there are a group of people who are called chlorophyll people or Greenies. These are the only people who can afford genetic engineering, which allows them to live solely on sunbathing. By turning themselves into a new species, a hybrid of plant and animal, these people try to avoid the coming starvation. However, there are also normal people who can not afford it, therefore, live a poor life. That is why these elite people are also called Cabbage, Watermelon Head, Kale Leaves by people who are against them. Because of all the hatred, Greenies are protected by security and they want to live in separate colonies.

The protagonist who works as security also hates Greenies. When the protagonist and his lover, Rita, infiltrate the first separate pilot colony at the request of their boss, they are told that some people have vanished into thin air and their bodies have never been found in the colony area. During the mission, his girlfriend disappears too and he learns some members of this solar community have been acting differently. While still searching for clues, he comes to the kitchen section and opens the

refrigerator, realizing Rita has been murdered and placed in there. Later, the protagonist is caught by some colony members and brought to a secret gathering. What he sees is reminiscent of a gothic Edgar Allan Poe story:

What a horrible display of people. Black, burned, with no meat in their gums. Some of them were so crinkled they seemed like those fossils that appear in documentaries. One of the specters asked me if I wanted to eat. The others started laughing like crazy, like rattling corpses. (Marçal, 2018)

Because of the comfort and greed of their wealth, these Greenies enjoy eating raw meat for pleasure, even though their bodies have been modified and they do not need to eat. In this case, they call themselves carnivore plants. As a result, the protagonist concludes that this new species is not humanity's best hope for the future as it is promoted, but rather a series of horrible experiments performed on themselves by the wealthy. These new species have become dehumanized monsters. Because of such modifications' expensive cost, they also cause a class conflict. Even when the capitalist elites do not require consumption, they continue to support the capitalist system by consuming only for pleasure. Technological progress, which developed without any moral or ethical underpinnings, has unfortunately resulted in social collapse rather than social progress.

Although *Sun in the Heart* (2018) appears to be the most upbeat and optimistic of these stories, concepts such as class conflict, posthumanism, and transhumanism are all called into question like in the previous story. It begins with very utopian descriptions, however, it is revealed that this is a deceptive situation. The sun's rays have reached such a dangerous level in the story set in the year 2214 that they both cause cancer and destroy crops. A scientist was able to solve both problems by inventing solar implants/tattoos which protect people from disease and eliminate food shortages. But, as in the previous story, these implants are only available to people with a certain income level. This scientist, even though he claims that he invented these tattoos "for the good of the planet," it is understood that this was not his real intention from the fact that he becomes suddenly incredibly rich (Spindler, 2018). The plot revolves around a three-person family's crisis over Élio's risky first implant as a leukemia patient. On the one hand, Laura, the mother, wants her child implanted

despite the risks because her brother could not be implanted and died in the past due to financial constraints. On the other hand, father Lúcio, who easily obtains his implant and has never been in such a life-or-death situation, believes that he has lost his humanity and that implants are harmful because he can not eat or drink like he used to. Sun is both a salvation and a curse in this case and creates a paradox.

Solutions have different effects and are not available to everyone, just as the climate crisis affects each class differently. Two different class groups' thoughts can be seen in the story. On the one hand, there's the wealthy Lúcio and his blindness, unable to see the true suffering that people go through, and on the other, there's Laura and her fears and anger. Although Élio's first implant is successful and the story has a happy ending, the main point of the story is that technological developments, posthumanism, and transhumanism can not be understood correctly due to confusion and prejudiced reactions such as fear. The economic motivations in the production of these technologies are what put people in such a dilemma. At this point, social injustice has not been eliminated yet, on the contrary, it has been fueled. Laura would not have been so insistent and harsh on implants if the scientist who developed them had presented them in a way that anyone could freely use them. Additionally, for the same reason, Lúcio would not be so skeptical.

The effect of Cyberpunk on the subgenre, explains why subjects like technology, posthumanism, and transhumanism are treated with such skepticism, if not outright hostility, in these four stories from the first anthology. As in later Solarpunk anthologies, technology is not yet viewed as a harmonious part of humans and nature. Because, in a capitalist, hierarchical, patriarchal, sexist, racist, and speciesist worldview, technology continues to harm people, and consume them as a source of energy, rather than serving the welfare of living things and nature. It is not yet a tool that assists people in adapting to difficult living conditions, but a tool that dehumanizes and transforms them into creatures. As a result, the stories are told in a gothic setting, with characters who are dominated by emotions such as fear, anxiety, doubt, paranoia, danger, vengeance, greed, selfishness, and bitterness. However, the influence of Cyberpunk has both diminished and softened in later anthologies. For example, there are softer and more information technology-oriented stories, ranging from the use of a

computer term as a story title, such as *Fyrewall* (2018) by Stefani Cox, to a hacking activity or a metaverse competition.

T.X. Watson's *The Boston Hearth Project* (2017) takes place in the near future, in 2022. The weather is getting colder as a result of the global climate crisis, and the death toll among the homeless is rising. However, in the absence of a solution, a smart, living, and ultra-luxury technological building is built for the accommodation of wealthy business people and politicians. Therefore, with Solarpunk sensibility, the queer and disabled character Andie engages in collective hacking action of the building with Kay, an activist who provides a shelter for homeless and queer youth, and Juniper, an experienced urban explorer. While the city, particularly because of its polluted air, is an ecological disaster, this new building has its closed ecosystem and serves as an illusion to its visitors, distracting them from the city's real life, and problems. So they hack the building, allowing the homeless to take shelter inside and using the building's smart systems to transform it into a fortress. They then turn the building into an art project, replacing the Art Deco design with the vibrant colors of Solarpunk.

Again, in this story, green technologies are developed and used only for benefit of a small group of people. Any technology that costs a human's or any living being's life is not green or environmentally friendly. Cyberpunk's hacker ethics are used as a protest and action tool in this case to ensure equality and justice. Rather than portraying technology in a purely negative light, as in previous stories, it has been emphasized that these technologies have varying consequences in the hands of various thinking systems. Technology can be a useful tool when combined with digital activism and human rights, or it can be an element in a capitalist order that deepens social injustices and increases insensitivity to the environment. Here everything depends on the choices.

When it comes to choices, the last story to be analyzed in this light is Avital Balwit's *Vladivostok* (2021). Ronan and Bryan participate in a competition held in Metropolis, a virtual megacity. As a metaverse, it contains virtual versions of almost everything that exists in the real life. In this virtual game, a contest is held for the Amur Tiger, which is extremely rare in the wild and does not yet have a virtual counterpart in Metropolis. That is why Ronan and Bryan travel to Vladivostok to be the first to photograph and digitize the animal. During this journey, the two's relationship begins

to deteriorate. These two people, who know each other in the metaverse through different avatars, gradually realize how incompatible they are with each other. While Ronan prefers nature, Bryan prefers Metropolis to real life. Because this metaverse is a utopia for him, and he can escape from all realities with which he is incapable of dealing. That is why Bryan is unsure how to deal with the first Amur tiger they encounter, and his fear of the Other manifests itself. Because he believes the tiger is about to attack him, he fires the sonic gun and scares the animal, even though the tiger is just walking around calmly.

Bryan is part of a system that forces people to digitize, domesticate, and place nature and animals in an artificial ecosystem. Here, the colonial mindset is on full display. Simultaneously, the extinction or death of these replicated species in real life is unimportant to this system, leading to apathy.

Of course, not everyone is included in this system. Ronan and the people of Vladivostok think differently than Bryan. While the natives prefer not to participate in the Metropolis game, Ronan gradually realizes that a tiger image is not the same as a real tiger. Even in the first sentence of the story, it is clear that the girl always takes a different stance: “Ronan had grown up on the other edge of the boreal...” (Balwit, 2021). She is always on the other side of the situation, therefore, evaluates things more clearly and differently. So, while Bryan returns to Metropolis, believing Vladivostok is too “wild, foreign, unreadable, and unyielding” for him, Ronan chooses to live in the city, impressed by nature and the tranquility of people who live in harmony with wilderness and animals.

Unfortunately, the story deepens the nature/technology dichotomy. Also, the female protagonist and natives are shown to be more in harmony with nature, whereas the male protagonist is portrayed as a character who prefers technology. Of course, this is due to the Cyberpunk influence. Although it can be classified as post-cyberpunk, with its emphasis on nature, and extinct species, criticism of colonization, and questioning, it is a Solarpunk work.

As a result, Solarpunk takes a critical approach to technology and science. Because people develop technology and conduct scientific research, it recognizes that these products and studies will not develop independently of people’s moral and ethical values, philosophies, goals, and personal thoughts. It focuses on how deceptive

the technologies can be that appear to be good and useful. In order to show this critical aspect, the authors first benefited from the elements of Cyberpunk narratives. Because Solarpunk is a multifaceted and polyphonic movement, these stories are not excluded from the subgenre. On the contrary, they must be thoroughly examined. Because, to be a part of this subgenre, the values it opposes and defends must be clearly understood. All of these stories were about how a Solarpunk future should not be. Following that, other short stories from other anthologies will be discussed that focus more on how they should be. In this context, the narratives that exemplify the type of attitude that should be displayed on the path to the desired future will be examined first.

3.1.2 Rebellion and Punk

Solarpunk is more than just being critical. It also intends to take action. That is why all short stories are not just narratives, but also a tool for activism. As stated in the manifesto “the ‘punk’ in Solarpunk is about rebellion, counterculture, post-capitalism, decolonialism, and enthusiasm. It is about going in a different direction than the mainstream, which is increasingly going in a scary direction” (The Solarpunk Community, n.d.). In this case, Solarpunk is not simply wishing and hoping for the desired future, but taking direct action to achieve it, which distinguishes it from other green utopias or climate fiction. Solarpunk, for example, does not depict people attempting to survive in a post-apocalyptic world. When such a situation is in question, the focus is on how to overcome it most creatively and beneficially.

The direct action, in this case, is not about aggression. It is geared toward demonstrating as much non-violence as possible. According to Commando Jugendstil, a group that is often associated with the punk attitude of the subgenre, particularly because of their story *Midsummer Night's Heist* (2018), the punk attitude in Solarpunk is to combine art and technology, to be human and community-oriented, to acting collectively, to produce creative solutions by using the available opportunities most beneficially, and to show discomfort (CommandoJugendstil et al., 2021). Although these punk attitudes are nonviolent, whether they are legal or illegal is entirely up to the individual. As a result, Solarpunks, who are opposed to western patriarchal society

values, systems, and all forms of harm caused by them, act as ecofeminists by employing a punk attitude as a form of constructive anarchism, rather than acting like a nihilist (Cyberpunks) or like an escapist (Steampunks or Dieselpunks). Punk is expressed in this subgenre through positivity, practicality, beauty, harmony, respect, knowledge, logic, and innovation. It is both aesthetically pleasing and functional. As Adam Flynn (2014) stated, the punk attitude emphasizes the applicability of Solarpunk, and the goal of this applicability is to save not only the present but also the future world, living things, and generations. As a result, every Solarpunk is an “innovative dissent” (Flynn, 2014). Finally, to sum up this punk attitude in a single image, the following is quite appropriate: “imagine a scene, set in the future, where a child in Burning Man–style punk clothing is standing in front of a yurt powered by solar panels” (Cassauwers, 2018).

The first short story to be examined to demonstrate Solarpunk’s innovative dissent side is *Solar Child* (2017) by Camille Meyers. On Earth, a planet plagued by problems such as drought, flood, and infertility, a group known as the Revelationers is launching armed attacks on scientists and their laboratories; while, scientists are attempting to help humanity evolve and live healthier lives through genetic engineering. The conflict between religion and science, unfortunately, devolves into brutal violence. Jamie and Floyd, two scientists, were once subjected to one of these attacks in their floating lab in the middle of the ocean. They have almost lost one of the most important projects, the first photosaphien Ella, which combines the natural and the technological, as a result of this attack. Although this brutality makes them suspicious and cautious, they chose not to respond to violence with violence and instead continue their research and work for the sake of the collective. Their resistance and punk attitude are their scientific research that unites all opposites and attempts to adapt people to the harsh conditions of the world. Their goal is not to destroy, but to bring life back to a world riddled with infertility and disabled births.

These two scientists’ resistance is not only their creations, which are transhumans that are born out of synthetic wombs and the only ones who can survive under the current conditions of the world but also their way of life. Their floating lab is a self-sufficient place, like photosaphiens, and they are growing their own foods, producing energy through solar panels. However, to create this sustainable

environment, they need high technology which costs a lot. In addition, finding a sponsor for their research is almost impossible because what they do is to add another step to the evolution of the human body and that is, of course, not welcomed by fundamentalist Revelationers who do not believe in evolution or simply reject it.

So, when Fernanda, a wealthy businesswoman who wants to both sponsor their work and adopt one of the photosaphien children, Jamie leaves her skeptical attitude behind and agrees to give up the baby by truly accepting that the targeted evolution can only spread to Earth through love. The adoption of this baby as a symbol of hope as well as a new beginning for humanity in this dying world has started the process of change:

No matter her fears about sending a photosaphien into the world, Jamie accepts the need for more people like Fernanda, willing to love a baby as a baby despite genetic differences. Willing to stand up to ridicule and defend against threats... Jamie kisses Ella's jade-dappled forehead. "It is true," she whispers. "Our evolution takes love." (Meyers, 2018)

Jamie, unlike Revelationers, realizes that any kind of conflict in the world, from minor to major, will not save humanity. Therefore, people have to collaborate, trust, and continue to support each other. Jamie and Floyd may be the people who created the photosaphiens, the greatest hope of humanity. But keeping these creations only to themselves, or can't find anyone to love and adopt them will nullify all these innovative dissent efforts.

Another short story is *The Exuberant Vitality of Hatchling Habitats* (2021) by D.A. Xiaolin Spires. Xueli and Camila, a builder and a painter, are high school students who create natural and sustainable sculptures out of recycled materials or food waste. Because there are no artificial substances in their creations, they are biodegradable. This state of transience and constant change in their creations is also well suited to nature's cycles.

They create their own invention, sustainink, and participate in a technology fair by creating a sculpture. Despite the significance of the story it tells, the sculpture, The SustainaThinker, which they created with the help of drones is unable to capture the attention of the jury members because it is quite ugly and smelly. However, it is inspired by a seagull seen by two young designers once, trying to eat french fries from

a trash can. This animal, which appears to be sick and hungry, is one of hundreds or even thousands of seagulls that have been deprived of their natural food sources due to overfishing and global warming. Unfortunately, not everyone understands the points they are attempting to highlight, their sensitivities, and the methods they are employing. But when they attract the attention of an eccentric entrepreneur, Ernesto Wu who understands them, rather than jury members who are enchanted by VR technology, their ideas and creativity begin to be truly valued.

They agree with the NOAA organization, which is aware of global problems and wants to use sustainable technology. Through this technology, the organization creates rock-islands with sustainable which are being built for seagulls to safely live and lay eggs. These islets, which eventually merge into the sea, become multispecies areas where people, drones, birds, and many other living species can coexist. Even if Xueli and Camila part ways after this project, their Solarpunk, and ecofeminist sensibilities make these two young innovators resist through creating: “in less than a week, we would go our separate ways, but as long as we had holoconferences and a love for invention and for bettering our society, we’d always remain in touch” (Spires, 2021).

Again, this is a quote that supports Commando Jugenstil’s interpretation of Solarpunk’s punk attitude because, as they stated, Solarpunk has a unifying and connecting structure. This is due to the subgenre’s punk attitude’s eclecticism, diversity, flexibility, and adaptability. The irresistible desire for change and taking action to make the world a better place is the fundamental motive behind the unification.

Characters such as Jamie, Floyd, Xueli, and Camila have chosen a different path from the general one because they insist on issues that most people choose to ignore. These characters do not sit back and wait for problems to be resolved, nor do they observe from a distance and become only witnesses. Instead of using harsh attitudes, violence, sharp rhetoric, or green-washed technologies to advance on this path, they have developed practical, useful, and solution-oriented technologies by combining their creativity, sensitivity to nature, and respect and love for all living things. It is also demonstrated that there are no limitations to taking direct action in such situations. No one’s knowledge or talent is dismissed because of their age or race,

for example. It is emphasized that everyone has the ability to find solutions to environmental issues and social injustices. One of the most important factors that will motivate the reader is this hope and belief that a situation that is seen as inevitable, is actually can be changed. In order to create this change, the characters no longer act alone, but collectively. Because the problems to be dealt with are global and cannot be dealt with a one-man heroic motive.

When it comes to collective direct action, the first short story that comes to mind is *Commando Jugendstil* and *Tales from the EV Studio's Midsummer Night's Heist* (2018). The story is about a joyful protest in Milan, which appears to have been made by a group of only six people, but later the entire city is involved, to prevent an important politician in Milan from making a speech that is full of racist and fascist rhetoric. While each member of this six-person group appears to be a complete punk on the outside, they are each unique individuals with their own talents.

Their symbol is ivy leaves which means “they will hang on and persist, slowly spreading until they have cleaned up all hydrocarbons and other filth from the city” (Commando Jugendstil & Tales from the EV Studio, 2018). All of their actions, such as guerilla gardening, are combinations of technology and aesthetics. This group also encourages and supports other people and groups with similar sensitivities to take action. It is precisely for this reason that they band together with the city's various counter and subcultural communities to prevent the police from interfering with their action to combat racism and fascism, resulting in festival-like chaos in the city at midnight. It is possible to witness so many different and irrelevant events on the roads of the city such as naked cyclists, the sudden emergence of pagan rituals, cheerful music heard here and there, and a performance in which actors act out a war scene.

Commando Jugendstil's work is revealed at the end of the carnival when the sun rises and breaks on this chaos. The resulting work is an example of the wonders that different elements such as art, ecology, and technology can create when brought together, much like the beautiful and joyful environment that happens when all these different people come together. The group transforms the politician's speech area into a garden. With the energy from the solar panels, cheerful music is played in this garden. A mystical atmosphere is created by the scents of the plants and the light reflections of the glasses, which give the impression of an open-air cathedral. The

cultural background of the city, as well as its racial diversity, is revealed through ten lateral panels and the historical paintings on them. At the same time, because this is an interactive project, visitors to the garden can interact with it by entering it and spending time there.

This is the exact punk attitude of Solarpunk. Everyone is a part of the action, from the person who devised it to those who assisted and even to those who were unaware of the action. It is also one of the most powerful examples of the power of unity. Racism is a worldwide issue. As a result, it is unrealistic to expect a six-person action to be successful and well-received. However, things begin to change when the entire city becomes involved, when everyone begins to make noise and acts collectively. This protest against patriarchal institutions and structures such as politics, policy, and the government is insane, fun, chaotic, and mystic. Here anarchism is a unifying force realized through love and joy in the face of discriminatory and oppressive institutions. Therefore, from its emphasis on social injustice, ecology, love, and resistance to patriarchy, this is not only a Solarpunk action but also an ecofeminist action. In this thesis, from the very beginning, these two terms are seen as systems of thought that cover each other. Therefore, when talking about a Solarpunk feature, for example, it would be wrong not to think that this feature is also associated with ecofeminism.

Riot of the Wind and the Sun (2018) by Jennifer Lee Rossman is the second story to examine the significance of collective action. The word Riot in the title of this story, like the word Heist in the previous one, is a clue that the punk features are intense in the story. The reason for the story's collective action is that the outposts that power the capitals are exploited and ignored, and they do not appear on the world map.

The "edgy and rebellious" music group, which also serves as the story's title, is a band formed by people who fought for the rights of all these outposts, and it performs concerts, particularly in communities that have suffered injustices or are neglected (Rossman, 2018). Kiarra, the story's protagonist, lives in an opal mine, an outpost in Australia, and she desperately wants this band to perform in her area because she adores them. But the town she lives in, Coober Pedy, is no longer visible on the map and this means the band can't find their location. As a result, when she learns that

a hovercraft will pass through the sky to refresh the world map, she tries to make her town visible again.

Because all of the locals' items are phosphorescent, gathering and displaying them outside the mine is an excellent method for nighttime hovercraft to see them. As a result, the entire community attempts to draw a symbol by putting their clothes and belongings on the ground. However, the natural conditions of the region, specifically the wind blowing during the day and the sand it brings bury all of them and make them invisible again. In this case, Kiarra, undeterred, takes everyone out during the hovercraft's passage. Everyone lies on the ground, draws an arrow with their bodies in phosphorescent clothes, writes and shouts the name of the town. The story concludes when the band arrives for a concert in the town, which has managed to appear as a small bright spot on the map.

In the story, there are two instances of collective rebellion. The first rebellion resulted in a war, which, while beneficial to the communities, does not fit the nonviolent punk attitude. However, Kiarra and the local community's second action is a desirable type of action because it is based on the ethic of kinship within the community and the resulting solidarity. Again, the action in this story resembles a visual feast, like *Midsummer Night's Heist* and this is one of the important parts to consider any type of anarchist action as Solarpunk. Attempting to be visible, communicating with the entire world through the power of light and color, and acting collectively for it is Solarpunk-style punk action. With its references to Aboriginal natives and emphasis on exploitation, the story reminds its readers that there are many oppressed and neglected people in many parts of the world. Furthermore, as in this story, these people lose their visibility. These people are frequently deprived of the opportunity to explain themselves or demonstrate their existence. However, in Solarpunk, Solar is associated with visibility and representation because the Sun illuminates everyone without any discrimination. Therefore, this subgenre and movement allow people from all walks of life to represent themselves because there is no better way to address social injustices without giving them any chance to talk.

3.1.3 Communal Life and Kinship

As can be seen from the preceding analysis, being a community is one of the elements that Solarpunk values the most, bringing it closer to ecofeminism. It is important to note that the concept is used extensively in the thesis while conducting an analysis based on communal life. Because, as a subgenre that opposes all forms of discrimination, including speciesism, Solarpunk advocates the coexistence of all living things, including more-than-humans, and non-humans. Solarpunk narratives and philosophy use society as a novum and kinship is the most important pillar of this society.

According to Donna Haraway, while people like the idea of being able to exist on their own, they have never been able to do so at any point in history. They have always been intertwined with humans, non-human, and more-than-human elements, influencing one another. Furthermore, not only do they influence one another, but also they are all “kin in the deepest sense” (Haraway, 2015: 162). At this point, terms like kin and kin-making refer to the process of forming relationships and bonds with people and other living things on Earth. In other words, it is not necessary to have blood ties to feel respect and love for another person or living thing. Given the point of discrimination in the Western patriarchal system which destroyed the previous organic community and its damage to both people and nature (social injustices and environmental destruction), kin-making is actually what is most needed. Haraway (2015: 161) states that “who and whatever we are, we need to make-with—become-with, compose-with—the earth-bound”.

This way of thinking is, for example, a challenge to the concept of family. There is no requirement for a biological bond to be a family or to be of the same species anymore. In this case, feminine values such as love, connection, respect, collaboration, and caring become the main aspects that get species together, and solid and deep relationships begin to be shaped. As a result, non-patriarchal and non-hierarchical societies are created.

This unifying concept, kinship, which is based on accepting diversity is also central to Solarpunk. Above all, the people who define themselves as the Solarpunk

Community came together and got to know each other through a virtual environment such as the internet, and this did not prevent them from forming a strong bond.

The issue of making kin and its power is also mentioned in the Introduction section of the last anthology *Multispecies Cities: Solarpunk Urban Futures* (2021), which has the most ecofeminist features. When imagining and designing the world's and people's future, it is argued that all actors in the world should be included and their alliance is a necessity. Animals, plants, air, water, earth, and so on are not only resources for humanity. They are important non-human and more-than-human participants of the Earth and humans depend on them. Therefore, there should be negotiation, coexistence, and bonding to "flourish together" (Rupprecht et al., 2021).

The first topic to be discussed is how kinship leads to new lifestyles, especially in cities that have been considered as both opposite of nature and a harmful creation for humans. Due to its potential, the setting in most of the stories is more urban than rural. City life, as long as certain criteria are met, is not a negative but a positive element for Solarpunk, which avoids a regressive attitude. Smart buildings with only green exteriors or for the use of a specific group of people, cities devoid of biodiversity, or supporting capitalism and power-based values are not acceptable in Solarpunk. The main purpose is to create "egalitarian eco-city-states" based on sustainability (Williams, 2019: 6). Therefore, the concept of the city and its life is questioned and given new meanings in this subgenre, which envisions the questioning and reinterpretation of many concepts.

The first short story to be examined in this direction is *Caught Root* (2018) by Julia K. Patt, which shares many similarities with *Ecotopia* (1975). The novel, *Ecotopia* is set in 1999. Its plot revolves around the travel of American journalist William Weston to Ecotopia, a new territory in the western United States that proclaimed independence years ago. Similar to Starhawk's work, the United States is depicted as dystopian in this work, with aspects like air pollution and famine, but Ecotopia is more utopian with its ecology-based society. Sexual freedom, community life, respect for nature, and a care-based lifestyle are what make this place attractive and ideal. At the end of his visit, it is seen that William, who despises and judges both Ecotopia and its people, decides to stay in this new country. His experiences there

demonstrate that his life in the United States is not right. In Ecotopia, he finds love both against nature and Merissa.

In *Caught Root*, there is a similar schema as well. There are two different cities, which is one of the best examples to show there is no one way to be a Solarpunk. One of these cities is New-Ur, which advocates low tech and is based on reclamation and reuse, and the other is “unblemished” and “new-looking” Hillside, which is based on high tech and recycling (Patt, 2018).

While New-Ur looks more in harmony with nature, Hillside looks more futuristic. However, New-Ur is not completely distant from technology and science. There are, for example, studies on seeds through genetic engineering, and the protagonist Dr. Khadir is also a scientist. Despite their differences, both cities share one goal: to make societies better through re-imagining civilization. With Dr. Khadir, who looks like a hippie with flowers in his hair; with circular, communal, and self-sustaining spaces that create a whole when combined; and a school system where children learn about nature through experience, New-Ur appears to be an extension of Ecotopia. Furthermore, just as Callenbach envisioned, everyone works together and shares duties, and the city continues to exist in harmony with the natural cycles. The inclusiveness of the concept of communal life is also understood throughout the story, particularly with the emphasis on plant diversity.

In this story, two problems are solved as a result of communal life and kinship. The first is the two cities’ distrust of each other. It resolves when Ewan comes to New-Ur, creates relationships with people, and know each other. The second is on a more personal level, as Ewan, much like William in Ecotopia, feels happier and more at ease by both finding love and kinship, and having a good time in the city. Just as William is fascinated by Ecotopia, and particularly Merissa in Callenbach’s story, Ewan is also fascinated by Khadir and New-Ur and hesitates to return to his home city. However, it becomes clear that he will come back to New-Ur after Khadir’s implicit request and Ewan’s positive response.

Because of these parallels with Callenbah’s work, this story, which can also be considered an ecofeminist short story, depicts a non-hierarchical society based on love and care. The entire city works together for a common goal, and because of their kinship, they are like a big family. This kinship exists not only on the human level but

also on the natural level. Although there are two distinct city structures, no information about the relationships within Hillside is provided in the story except that they are not as sentimental as New-Ur people. Hillside is promoted as an automated city, with the same circular configuration as New-Ur, using environmentally friendly technologies such as solar panels, incorporating “lessons and methods from every culture” and giving its citizens more time to improve themselves thanks to technology (Patt, 2018). Neither is portrayed as better than the other. However, because of the emphasis on communal life and kinship, New-Ur demonstrates how through these values city life, which normally divides people, can be unifying and healing.

Iron Fox in the Marble City (2021) by Vlad-Andrei Cucu is another short story that will be examined through the lens of kinship and city life. Cucu depicts a Solarpunk Tokyo that surprises even the story’s protagonist Kitsunehound. Because people are accustomed to Cyberpunk’s dark and capitalist, technologically advanced but morally decaying large city depictions, especially about Japan. However, due to philosophies such as Taoism, Shinto, and Buddhism, technologically advanced Japan is certainly more inclined towards a future like Solarpunk than Cyberpunk:

Most of the buildings had been renovated with colorful decorations, marble supports, and lush greens. Almost every building had trees growing around it or was covered in various plants. The air was fresh, like Madagascar before the war. There were fewer cars and more trolleys on the roads, people walked or cycled everywhere, the streets busy and lively but somehow still quiet and relaxed. (Cucu, 2021)

Returning to his birth city as a war machine cyborg, Kitsunehound attempts to adapt to this new city, Nu-Tokyo, to become a part of the community and find a place in it where he can be useful. While the city people are eager to accept him without judgment, he considers himself an outcast. He introduces himself using his military code NX-5412314995, reduces himself to a series of digits, and describes the military tasks he has completed. Kitsunehound considers himself to be a machine, and the only human relationship and communication he has ever had are with his fellow soldier Jeff, which consist of only a few simple sentences about their mission before Jeff dies. In this way, the individual costs of wars, such as isolation and alienation are highlighted. According to the LFD, where he was a soldier at the time, war is an

unavoidable part of the global economy, and it is because of this patriarchal thinking that both global and personal losses are insignificant. People are viewed as disposable pawns, with no regard for their humanity. As previously stated, militarism is one of the most harmful things.

Beyond that, Kitsunehound demonstrates that anyone and everything can be accepted into the community and find a suitable place in it. Kitsune means fox in Japanese and fox is a sign of good fortune, intelligence, and friendship. In Nu-Tokyo's city life which is based on kinship, communication, and care, Kitsunehound deals with gardening and agriculture, meets new people and chats, spends quality time strengthening his bonds, and forms a friendship with a cat and a plant. As a result, he finally begins to abandon his individualistic and independent nature, which he inherited from the military. Furthermore, the ex-soldier, who still does not feel fully integrated into the city and community, eventually allows the city to heal himself and himself to heal the city. He halts the LFD's attack on the water pumps, repairs the damaged infrastructure by connecting himself to the pumps, and finally feels as if he has found his purpose and is useful to society:

It has been around two months since, and I am now officially the new water pump of the dome garden... I also still get regular visits from Seiji and company, and a couple of days ago they allowed animals inside the garden. So now I have a plant named Jeff and a cat named Voice... Overall, life is good as a water pump. (Cucu, 2021)

The communal lifestyle and the values that go with it, such as kinship, solidarity, and commitment, have the power to completely transform a city. In Nu-Tokyo, these values are combined with the adoption of an ecology-based lifestyle. Natural materials are used inside and outside the buildings, and sometimes nature is allowed to be the building itself. The Workers' Union, a non-hierarchical organization, meeting at a table placed under a tree by the sea is a good example of this.

Kitsunehound can't find a place for himself in a city built on such "pacifist" and "utopian principles" by internalizing the divisive thinking of the patriarchal system that made him a machine (Cucu, 2021). However, in the end, he realizes that differences are accepted by all in a city order like this, based on species and people's kinship.

Human life, therefore, city life, cannot be sustained and remains incomplete in the absence of non-human and more-than-human elements. As previously stated, communal life is a concept that should be evaluated from a very broad perspective. One of the short stories that demonstrate this is *The Streams Are Paved With Fish Traps* (2021) by Octavia Cade. In the story that focuses on the distance and tension between a married couple, the protagonist woman works in the tunnels that are important to the city's infrastructure and takes care of the pipes. While the entire city can survive thanks to the eels living in these pipes, most people are unaware of it or do not care. As a result, they do not care if any substance they throw into their waste pipes can injure or even kill one of these creatures or not. So, when this happens and when one of the eels becomes ill, the woman brings it home and takes care of it. Dan, the husband, and the woman's relationship improve as they become friends with the eel. Dan, being aware of this inter-species bond and the importance of species in each other's lives, builds a glass between underground and above-ground environments to both mend his relationship with his wife and demonstrate to the entire city that there is a perfect ecosystem underground:

There are parks above, green spaces, and trees in every Street as we try to coax life back to the cities, to make it more than a two-dimensional space for a single species. A place where that third dimension, when exploited, only ever went up. Which was good for the birds, roosting in high places and with the wind in their feathers, but there are low things living too, in stream beds and under the overhang of riverbeds, and those were what we forgot. (Cade, 2021)

Any infrastructure is important to Solarpunk because it unites in every way. A city can't exist without infrastructure, and people can't connect without relational and communicative infrastructure. Dan breaks down the wall between him and his wife by removing the border and the separation between above and below. When he brings the species together, the distance between him and his wife vanishes. It is important to recognize that all living things coexist, therefore, attempting to ignore some living things or live a life without them is a futile endeavor. The ecosystem is a whole, and the kinship that develops within is the fundamental element that connects everyone and everything.

The Spider and The Stars (2018) by D.K. Mok is another example of this situation as the analysis progress from human to human relationships to human to non and more-than-human relationships. Del, an entomologist who follows in her mother's footsteps, has grown up around insects and has a pet spider named Artemis. Del, who is heavily influenced by the physiological and biological structure of insects, believes that by being inspired by them, many technologies that can help people can be developed. She also realizes how complex insects' behaviors are, so she gradually stops consuming insect protein products. With this sensitivity, the young scientist creates a spider-inspired technology for human space travel. Del applies the self-renewing feature of spider webs to spaceships to emphasize that life on other planets depends on our ability to mimic our own ecosystems. In this way, she proposes building space ships that can adapt to harsh space conditions and regenerate themselves. It is true that the sterile, silver and cold spaceships and space stations of classic sci-fi are unfit for human life, and that people suffer from various diseases when there is no biological and ecological diversity. That is why Terrarium Space Station, which was established thirty years after presenting her project, is a living ecosystem in and of itself, containing all living things:

Throughout the hall, aluminium trusses were laced with lilac wisteria, and mesh walls brimmed with ferns and bromeliads, forming an avenue of vertical gardens. Despite the softly humming filtration systems, the scent of orange blossom and pear tarts wafted from the nearby cafés. (Mok, 2018)

This station, which resembles an ecological, living city in space, is also home to insects, and new areas are being prepared to welcome many other creatures, such as octopuses. Del, who creates a connection between earth and space through the "moonlit image of a stargazing spider," one of her mother's bedtime stories when she was a child, comes to believe that not only humans but also other living things can live there. The unity of two different and contrasting things, the spider as a microcosmic being and space as a macrocosmic structure opens up new possibilities in her mind. Furthermore, when she looks at the Earth from the space station years later, she realizes how intertwined every living thing is, how they appear as a whole, and how each living thing has a complex and unique structure within itself. Life emerges from the mingling

of all these differences. Del understands this because of her kinship with insects, particularly Artemis, and she uses this wisdom to bring life to alternative places such as space.

In the final three short stories, the analysis, which began with communal life values that change human relations and urban life, will focus more on the kinship between animals and humans. Because the bond formed with animals and the attempt to understand them plays an important role in the future societies of Solarpunk, which are proposed as novum and attempt to challenge patriarchal, hierarchal, destructive, and discriminative norms and structures. Animals are not just pets or savages to be owned, tamed, or killed but conscious beings in their own right.

Meyari McFarland's *Old Man's Sea* (2021) describes how the military is still active in a post-apocalyptic world, and how it uses orcas for its purposes by modifying them with cybernetic limbs to make them speak to and understand people. One of the story's characters, a retired orca named Wartooth, is a sea creature with the personality of a grumpy old man who was once used by the military to fight but is ignored when he gets old because he becomes useless.

Humanity is divided into two groups: land-dwellers and sea-dwellers, and there is always a war. That is why orcas are used and modified by the military. As a result, there is a life-or-death struggle both at sea and on land. One of those struggles belongs to Efe and Moana. When Efe dives deep in search of food, a conflict arises in the sea, which is also orcas' natural habitat. Wartooth claims that she does not belong in the sea, but Efe was born in the sea and refuses to make such a distinction between them. However, when the military orcas arrive in Efe's area to train, Wartooth fights them to protect the girl. The two who communicate by speaking thanks to the cybernetic network, also establish non-verbal communication and bond after this fight: "Wartooth surfaced. He blew a great blast while rolling enough that he could stare at her with one wide eye. Efe flipped a hand at him" (McFarland, 2021). Wartooth, who told them to migrate to a safe place, also suggests that she should learn the orca language. After all these, the old orca becomes the guardian angel of the girls, therefore, they continue their journey feeling safe.

Wartooth is forced into a war that had nothing to do with him, his body is forcibly altered, he is given a soldier's voice, and then his artificial limbs are removed

and he is left to die because he is aging. Normally, he has prejudices about people. They removed the essence of the orca by changing its natural form and replacing its orca language with a human's voice and language. This is yet another method of colonization or domestication. But the bond he forms with Efe destroys this process. Having both verbal and non-verbal communication, and the orca's offer to Efe to learn their language indicates the revival of the two species' long-dormant kinship. The fact that this revival takes place in an environment like the sea demonstrates how deep and archaic the bond is, as it represents the mother's womb. This is an example of how, no matter how hard some systems try, the organic bond between species will always be preserved and remembered.

In *Untamed* (2021) by Timothy Yam, a similar kind of relationship and kinship emerges. It's a short story about a rebellious girl and an untamed mynah who form a friendship over time. After being reported and sentenced to environmental labor, she begins working in a roof garden, where she is responsible for plants, insects, and animals. Working with an old man at first and being constantly disturbed by a mynah, the girl is reluctant to create a bond and communicate with the man because of her anger towards life and people. Therefore, the entire gardening business disturbs her. However, when the old man has a heart attack and the severe storms caused by climate change begin to damage the garden, she feels an urge to save it. She manages to protect it thanks to Mynah's assistance.

After cleaning the damaged garden, she is invited to dine with a group that appreciates her efforts. Although she does not feel completely at ease at this commune dining event, all of these experiences profoundly alter her relationship with the garden, namely nature:

Something about it seemed easier now. It was like when she put together jigsaw puzzles as a child. Initially they were difficult, but once she figured out what the picture was supposed to be, everything clicked into place. The trees, the bushes, the herbs, the insects—all now seemed to vibrate at the same frequency as her.
(Yam, 2021)

The bird and the girl have the same characteristics, which is why they get along so well and fight so much. This demonstrates how two seemingly dissimilar species can be the same. Their kinship and relationship are different. Even though it appears

to bother her all the time, the bird assists her like a fellow in saving the garden at a critical juncture: “As she tried to decipher the old man’s gnarled handwriting, she felt a light pressure on her shoulder, as though a friend were laying a hand on it” (Yam, 2021).

She hates everything at first, from the sun to the plants to the old man to the bird. But, over time, she can connect with humans, non-humans, and more-than-humans. The girl who feels alone, particularly because of her family, realizes that she is not. There are many living things around her and she is one with them. The best example of this is when she truly assumes the role of garden guardian, protecting and taking care of it, the garden also protects and assists her. Therefore, she is no longer isolated and alone.

The last short story is *In Two Minds* (2021) by Joel R. Hunt. Three different attitudes are displayed in this story about people’s different attitudes toward animals who can be jacked. The first is related to the patriarchal system’s mentality, in which sergeants like Ito want to use animals for their purposes or confine them in a border, a cage. Birds can be used as security cameras according to people like Ito, and dogs are potential killers and Others, so when they harm someone, they must be caged and sentenced to death. Because animals can’t speak and defend themselves, they are easily accused and killed. They are not included in a judicial system, as Christine L. Garcia states (2011: 145).

The second destructive attitude is that people with jacking skills abuse animals and use them as slaves in their criminal activities. Animal jacking is similar to hacking in some ways. When a human jacks an animal’s brain, the animal suffers trauma because no animal would ever consent to such an action. This is another area where the dominant patriarchal system’s invasive attitude manifests itself through technology.

The final attitude is that of people with a Solarpunk sensibility, such as Tomo. Tomo has the ability to jack, but he never abuses it. All of an animal’s senses and emotions can be felt with jacking, and Tomo realizes how devastating this can be for both him and the animal. Therefore, Tomo uses his ability to free animals from human captivity, acting more like an empath than a hacker. Furthermore, the relationship he formed with the mice who share his home and food is fascinating. His brain and the

rat's brain are linked to a common cloud, and rats, unlike the dog, agree to this connection:

Most were content to let him spectate through their eyes and filter through their recent memories, but some responded to his Jacking with thoughts of their own, seeping into Tomo's consciousness until they seemed to belong to him... Their animal minds didn't use words, but Tomo had learned to associate meaning to their feelings. (Hunt, 2021)

This bond, which has the structure of a hive mind, is based on their kinship. Rather than forcing the rats, Tomo attempts to understand them in their natural state. He becomes one with them. He does not regard himself and them as distinct entities or species. So, while rescuing forcibly held animals, he cooperates with all the animals. At this point, mice, other animals, and Tomo can all act as if they share a common mind, and as if they were organs connected to a single body.

In conclusion, it appears that Solarpunk futures cannot be imagined in the absence of communal life and kinship. Because the resulting damage can't be repaired without interspecies bonds and solidarity. Just as Haraway once called on feminists to "exercise leadership in imagination, theory, and action" to achieve "multispecies ecojustice", solarpunks also use sci-fi as a tool for this purpose, as if responding to this call (2015: 161). While they are imagining and taking action, they incorporate values like communal life and kinship because they are aware that these values lead to different ways of thinking and improving in a variety of areas, ranging from city structures to daily life, and from political relations to common relations. As the ancient bond between species is recognized and revived, progress is made in every field. The most important step in the development of kinship is to recognize the interconnectedness of human, non-human, and more-than-human beings.

3.1.4. Interconnectedness

People in Solarpunk narratives frequently bond, cooperate, or communicate with members of their own species as well as with members of other species. This is unavoidable due to its ecofeminist infrastructure. Although these linkages and interactions sometimes give the subgenre a fantasy feel rather than a sci-fi one, they

are in some ways realistic. On Earth, which is a living and dynamic planet, living beings cannot be thought of as separate or distinct from one another, the globe, or the universe. Therefore, it is incorrect to consider these established ties as an extraordinary situation.

According to Chandra Mondal and Majumder (2019: 482), “ecofeminism offers a way of thinking and organizing ourselves by encouraging interconnectedness with our environment”. Because it is only in this way that people will be able to comprehend the destruction they inflict on nature. This ecofeminist style of developing a self that is “interconnected with all life” and based on care and “responsibility” to other species and nature, unlike the masculine way of creating a self that is based on separation, has the potential to influence human actions (Gaard 1-2). The holistic connections that are emphasized in ecofeminism are also valid in Solarpunk. In the narratives, trees and plants or their representatives are generally used to describe these connections and unity. For example, in *Vladivostok* (2021) Ronan is described as more connected to nature than Bryan:

Whenever she felt lonely, she'd imagine the roots and rhizomes reaching all the way beneath the ocean, communicating and feeding the trees she'd known. Sometimes she'd place her hands in the freezing sea and imagine the water washing all the way back to her coast. (Balwit, 2021)

Because of their understanding of the interconnection of all existence, characters like Ronan can see the self as an extension of nature. Nature's sacredness has been resurrected, and it is no longer something to be exploited or examined. That is why, unlike Bryan, Ronan feels a greater sense of responsibility to protect it. Of course, this interconnectedness is not only global but also cosmic. *Dust* (2017) by Daniel José Older is an appropriate example of this. Jax, a gender-fluid, lives with zir crew on an asteroid named Rustvine. Resembling a miner, this crew excavates the asteroid with explosives and drilling. However, the asteroid's course leads to Earth, resulting in a major collision. Although the Earth is already uninhabitable, this collision is particularly dangerous for those who live on the asteroid, and the trajectory must be altered. Of course, the asteroid is a “celestial” entity, not a spaceship, as Jax puts it. As a result, no technical intervention is possible to affect its course. However, Jax has a special connection with the asteroid. Also, zie feels that she (zie refers to the

asteroid as she) is different from everything else. According to Jax, she not only breaths but also their breathing is synchronized. That is why zie can manage to swerve her route: “I exhale, the asteroid exhales with me. Because inside me, there is dust, it coats my lungs, my heart, it heeds me, and inside the asteroid, there is me, tiny, complex, and alive with desire. We breathe as one” (Older, 2017).

Jax’s gender fluidity prevents the interconnectedness with the cosmos from being assigned to a specific gender because otherwise, that would perpetuate the existing dualistic thinking. The fact that zie feels as if they are one in the “immensity” of space and that zie finds the asteroid “familiar” in an unfathomable way is proof that zir self is not separate from the universe and nature (Older, 2017).

When it comes to these kinds of connections, technology has always been considered a barrier between humans and the natural world. Solarpunk, on the other hand, challenges this notion. The self is viewed as an extension of nature, and technology is viewed as an extension of the self. Therefore, technology is a way to revive or strengthen the interconnectedness of human, non-human, and more-than-human beings. Solarpunk contends that science and spirituality may coexist, as some ecofeminists believe, and so the meaning and function of science and technology in sci-fi shifts.

The first short story to be analyzed in this context is *Trees in Between* (2017) by Karyn L. Stecyk. The themes of being one and being interconnected, which overlap with the philosophy of the previous narrative, are also dominant here. The mechanical tree Yggdrasil, which is also a vessel of Miraiha the protagonist, is the central element in the story. Its significance arises from the fact that it connects other link-trees and the people inside of them, much like the original mythological tree at the center of the cosmos that connects the cosmos’ nine parts. Because the world has become a place where super quakes happen and air pollution rises, Miraiha creates these artificial trees that not only ensure the oxygen balance in the air with artificial leaves but also collect seismic energy from earthquakes through the roots. She who sits inside the Yggdrasil, a place that represents a womb, enters a trance state similar to meditation, and transfers the destructive energy to the New Gaia, a virtual reality:

“Peace, harmony, serenity, I pledge,” the words came in ceremonial drumbeats, a mantra. “With all my being, everything I was, am, and will be, I swear to do whatever necessary to reverse the damage wreaked by my ancestors. Again together, we will thrive. A single harmonious spirit.” (Stecyk, 2017)

While doing this she feels the Earth’s energy in her veins and consciousness just like she feels every other tree and the people inside them. This grove’s “collective soul” also makes her feel all the pain when the trees begin to burn. In real life, when forest fires occur, all living things, from plants to animals experience a common pain, and this is represented by the suffering experienced by people in link-trees. Their terror, despair, panic, dying thoughts, and screams are all felt and heard by Miraiha. Therefore, with a huge effort, thanks to Yggdrasil and New Gaia’s omnidirectional connection, she brings water from the virtual place to reality through the leaves and puts the fire out.

Everything in the story is intertwined with one another. Every figure, element, place, and machine is a component of a bigger picture. Giving this unity at the same time through metaphysical subjects like mythology, and meditation, along with physical subjects like technology, is a good example of the simultaneous existence of spirituality and science. It also shows how technology strengthens interconnectedness. Throughout the story, there is a repetitive emphasis on balance, oneness, harmony, synchronicity, and communication just as in *Dust*. Both characters’ acts are based on meditation and energy flow that reactivates the spiritual connections. Their bond with the universe also reminds Ralph Waldo Emerson’s Over-Soul. According to Emerson (2001, The Project Gutenberg), it is the Unity “within which every man’s particular being is contained and made one with all other; that common heart” and this oneness is the base of the interconnectedness.

Joseph F. Nacino’s short story *Mariposa Awakening* (2021) is another related example, in which the hive mind, a notion that can be related to the Over-Soul, appears. Professor Marisol and her team create the MARIPOSA project, which combines old local ways and high technology to provide solutions to severe calamities in the Philippines, where superstorms and floods are common. These types of disasters occur all around the world, and people often prefer to deal with them by using artificial dams or artificial intelligence, both of which Marisol believes are insufficient. Therefore,

she combines the natural, mangroves which are used for several years to prevent floods, and artificial intelligence to create a verbal connection with plants: “That’s why by combining the mycorrhizal networks of the mangrove trees —the fungi that colonizes the trees’ roots—with data-learning AIs and a lot of expensive computers, we’ve developed an actual Green Intelligence” (Nacino, 2021).

Therefore, these plants, which form a hive mind, can create a single voice and communicate with Marisol and her team through a screen. Another interesting point is that these plants do not perceive Marisol and her team as separate entities or species, but consider them as plants. Again, this is about being one in essence and being interconnected. In this case, Marisol sees herself as “a wise old narra tree,” the Philippine’s national tree, and feels her unity with nature, just as Miraiha who behaves and feels almost like a tree. Both women can’t define and develop their selves separately from nature and technology helps them to create the connection.

All these examples and analyzes, in fact, gradually bring the survey on the societies of the future to one of the most important features of Solarpunk, which is challenging the dualistic thought system. Because to act as a community, create kinships, and realize interconnectedness, Solarpunk has to reject common dichotomies of man/woman, white/non-white, human/nature, technology/nature, and many more.

3.1.5. Breaking Dualistic Scheme

Ecofeminism and Solarpunk deconstruct traditional dichotomies that are also evident in classic sci-fi. Because both agree that these dichotomies cause disparities and irreversible harm to one side and these lead to environmental destruction and social injustice occur. It is important to remember that Solarpunk is a narrative as well as a movement. This means that it impacts and transforms the prevalent discourses in society, hence altering society’s way of thinking. This lays the groundwork for the desired social evolution. It is sometimes insufficient to remind individuals of the unity within the universe to achieve a just society devoid of all forms of violence and destruction. Because people are frequently exposed to dualistic thought systems’ discourses in their daily lives. Therefore, in all these new ecological and hopeful sci-

fi narratives, discriminatory discourses are decreased or completely erased to encourage people and change their minds to achieve the desired social evolution.

The attention and value Solarpunk places on diversity and plurality is the most significant feature that permits it to abolish dichotomy. When it comes to characters, settings, and authors, for example, every anthology is a patchwork. Although this can refer to the similar patchwork that American ideals promise, it differs in its application. While America's patchwork model homogenizes over time, destroying people's liberties, diversity, and rights, Solarpunk allows people to form communities while maintaining their individuality. Of course, there is no self/other dualism and its derivatives in such a formation.

In such a case, the first thing that comes to mind is that the heroic white male protagonists of sci-fi have been replaced by female and child figures. Women and children, as ecofeminism frequently emphasizes, are the ones who suffer the most from environmental damage. They are generally shown powerless and helpless in the face of white and patriarchal discourse and acts. On the contrary, Solarpunk's female and children protagonists demonstrate that such portrayal is flawed, that they are also scientists rather than lacking scientific understanding as is commonly assumed, and that they can mitigate the environmental damage through the technology they invent.

This is why most of the protagonists of Solarpunk are active women and children from every race who take action to stop the disaster. It is also common that the female figures are old. The old woman archetype, in Jungian analysis, means "the wisdom of the eternal female nature" which brings kindness and compassion (Jacobi, 1964: 279). She is independent, in tune with nature, and even, in her shadow side, a witch, a crone.

For example, just like in the *Mariposa Awakening* (2021), in *Deer, Tiger, and Witch* (2021) by Kate V. Bui, the main character is an old woman who is later accompanied by a 12-year-old girl. Although Thu is a scientist who cleans Vietnam's poisoned soil and waters, the locals refer to her as a witch. The old woman's wisdom that comes from experience and scientific understanding is misinterpreted as a mystery, just as it had been in ancient times, and she is referred as The Yellow Witch. This is related to the different interpretations of the wisdom that comes with age and stereotyping it, as well as the assumption that women lack scientific knowledge.

Furthermore, the idea that old people are useless to society is demolished in this narrative, because age is not an obstacle to Thu. She is a proactive individual who strives to improve nature, the planet, and society.

This wise woman, who works alone meets with Đông, a very smart little girl who has created her permacultural garden by using her techniques. However, when Thu starts to talk to the girl's mother, it is understood that this girl has no opportunity to go to school to improve her skills: "When Thu was younger, compulsory higher education was a luxury everyone took for granted, but after the climate and political upheavals, it had become desperately rare, especially for women" (Bui, 2021). Girls' education is extremely rare in nations like Vietnam, which has been dealing with issues such as war, colonization, and poverty, especially in rural areas. In addition, if climate conditions change, this rarity turns into a never. Because the hardships and burdens of these children and women rise. That is why in the end, Thu decides to stay in the village for a while when Đông implicitly asks her if she can teach science.

She truly brings life and hope back to the village by combining her knowledge with the girl's method to clean the lands and enhance agricultural yield. Unlike conventional western narratives, nothing in most Solarpunk stories is ever abruptly and miraculously rectified. There is a recognition that something takes time and effort, which Thu expresses in the narrative: "It won't be easy, but I think it's possible" (Bui, 2021). This situation can also be attributed to the fact that the main characters are different. Because Solarpunk characters lack the desire to win, to be appreciated, and the result-oriented behavior associated with Western male figures. They are process-oriented, and they understand that without values such as care and patience, as well as effort, this process will fail to produce useful results that will be for the good of all.

Besides elders, children, along with teenagers, are frequently preferred as protagonists in Solarpunk stories and they symbolize hope. They are also manifestations of the potential of the future. They are the Solar part of the movement due to their associations with joy, beginnings, vitality, and, growth. As a creation resulting from the combination of two different energies, masculine and feminine, the child also represents wholeness and unity and is the best figure that can be used to subvert dualistic thought. Also when they are portrayed with an elderly companion, just like in the previous example, together they form a cycle and a continuity which

also disrupts the linearity in the patriarchal system. Teenagers, on the other hand, give the necessary dynamism through their energy, rebellious manners, and creative minds.

In short stories like *The Spider and The Stars* (2018), *Cable Town Delivery* (2018), *Grow, Give, Repeat* (2018), *Sun in the Heart* (2018), *The Mammoth Steps* (2021), and *The Exuberant Vitality of Hatchling Habitats* (2021) the protagonist is either a child or the plot revolves around a child. Children, thanks to their scientific studies and ties to nature, play an active role in steering the world toward a better future in both cases. They are important members of the movement as symbols of innocence because they are unaffected by the system's mindset and discourse or because they are aware of it and have chosen to oppose it. Solarpunk values and emphasizes their curiosity and sensitivity because they are the next generation.

In *Children of Asphalt* (2021) by Phoebe Wagner, a new kin (a new kind of animal species) comes into a group of people's habitat. While all people of reason try to figure out what its purpose is and whether it will harm their crops or even harm them, children simply call it landrus without any such considerations. When a pregnant landrus dies as a result of the city wreckages and cries for help, children hear her cries. But considerations have been still keeping the adults busy. As a result, while adults are arguing, children try to smooth sharp edges and create safe places for births to prevent other possible injuries in other pregnant landruses: "While we had talked of action, the children has taken action... When we asked our children why, they said the crying landrus had been asking for help. Hadn't we heard?" (Wagner, 2021). This story demonstrates that children not only can begin something new and create hope, but they can also use and revive this ability in the lives of other creatures. While adults become passive as a result of their worries and thoughts, being drowned in the system, children who have not yet been affected by the system are more solution-oriented and active.

These children are not the only examples who can hear the call of nature. *The Songs that Humanity Lost Reluctantly to Dolphins* (2021) by Shweta Taneja shows other possible ways how nature communicates with children. Again adults are shown as blind and deaf because of their "own needs, desires, wants, and, silicon screens" while dolphins come up with empathology and start to sing (Taneja, 2021). Babies and children hear their song and call, crawl into the ocean and no one can understand their behavior. Those who are perplexed by this mystery, as in ancient times, believe it is

the work of the devil. Adults even begin to attack dolphins and it turns into a war against nature. However, when nature, for example, plants, also begins to sing, the children come back and each one emerges from the sea as a hybrid creature rather than a human. In addition, they bring fungi, moss, yeast, and mushrooms with them which cover the whole city. After that adults, just like in the previous story, begin to pay more attention to hearing the call of nature:

The songs of universe... We are not natives to the songs, but we are trying hard. We will listen till our ears bleed, we are determined, we will hear the songs you sing, the songs you listen, we will keep searching till we become one with the songs you have become. (Taneja, 2021)

It is understood that children are the key to change. They are pioneers, empaths, light-hearted, and loving. Therefore, in their joyful anarchism, adults have so many things to learn from them.

Solarpunk's take on the traditional protagonist scheme is not limited to female and child characters. Along with many queer authors, there are also many queer characters. Their real-life emphasis and struggles are intertwined with the crisis in the narratives. For example, a love between a queer couple can flourish thanks to nature. In *Caught Root* (2018) Dr. Khadir and Ewan's relationship begins when they start working together and spending time in nature, trying to keep up with its pace. Their love brings together not only two people but also two cities and societies. It is a love that nourishes all things and all people.

N. R. M. Roshak's *By the Light of the Stars* (2021) is another example. Mishael and Grace, two very different people, one from the city and the other from the countryside, are unable to form an emotional bond. Because their beliefs are so dissimilar. Grace has serious reservations about a possible relationship with Mishael, although she likes her. However, their relationship blossoms when they band together to save baby sea turtles who are unable to recognize moonlight due to the dense city lights. Working with, helping, or spending time with nature can bring two people who appear to have very different personalities together. Love is very important to LGBTI+ people, just as it is to the rest of humanity, and they frequently use the slogan "Love is love." Therefore the love for nature and the love for another person are intertwined in these narratives which destroy dualities.

Queer people are also rebellious in that they challenge many things, mainly gender norms. In narratives such as *The Boston Hearth Project* (2017) and *Midsummer Night's Heist* (2018), queer characters play important roles to prevent social injustice. While Andie Freeman from the first narrative is aware of the class imbalance in society and tries to save homeless people from death, Stabby from the second story is a biologist, good at martial arts and, “unofficial strategist of the gang”, helps zir group in their protests against racism (Commando Jugenstil & Tales from the EV Studio, 2018). Queers, as marginalized and hurt people, also help other marginalized ones and demonstrate their sensibilities, in this case with a punk attitude. They recognize that the mentality that marginalizes them is the same mentality that marginalizes others and harms the environment.

Solarpunk, from its narrative to its aesthetics is both a subgenre and a movement that values all kinds of disabilities. It is understood from Johnson's (2020) article that, according to one of the queer authors of Solarpunk T. X. Watson's observation, when the Art Nouveau fonts that are used in Solarpunk are compared with dyslexia fonts, it is realized that they are similar. In addition, both the movement's and its narrative's future predictions and city designs make life easier for people with disabilities. For example, as Ruta Butkute (2018) clarifies, Solarpunk cities are soothing because there is no pollution and no stress; and cities are designed to help disabled people to be mobile in public which derives mostly because of the emphasis on accessibility ethics. In this way, individuals with disabilities who live in cities do not see themselves as others in society because they do not face any difficulties in their daily lives.

Therefore, as another challenge, in narratives, disabled people show up as the protagonists or they are an important part of the action. Because they are part of the diversity. Furthermore, because disability is a social construct, it is broken in this way, and individuals no longer feel inadequate, other, or passive. In order to stand against environmental destruction and social injustices, everyone has to join the act, and technology plays an important role in this process. Andie Freeman, again, is a disabled person who uses a wheelchair but that does not prevent zie to hack the building. Because zie gets help from many technological devices and people. Webby is also another disabled and queer hacker from *Midsummer Night's Heist* (2018). She also has

a wheelchair and she turns off all the cameras, the eyes of the system, on the streets and makes the group invisible so that they can act freely. Disabled people are accepted as who they are in these stories. They are active participants. In their situation, technology is a tool that assists them rather than something that is used to “fix” them. Of course, when technology and disability are considered together, issues like posthumanism and transhumanism must be addressed. As previously stated, the body in Cyberpunk is an obstacle in and of itself, so it has to be overcome. But in Solarpunk, it is vice versa. It is open to technological adaptation for the current situations and conditions.

As Schuller (2019: 67) indicates Solarpunk creates something new by combining “twenty-first-century viewpoint of social concerns” with “techno-optimist post-humanist thought”. It acknowledges that technology is a product of humanity as well as part of it. Therefore, any kind of modification that increases humanity’s welfare is celebrated. That is why they are mentioned positively or associated with natural symbols like the Sun. These technology-driven adaptations to the environment are shown as liberating, therefore, posthumanism is an optimistic alternative to imagining the future of humanity (Schuller, 2019: 41-42). In this manner, unlike Cyberpunk, Solarpunk destroys the dichotomy of nature/technology and turns technology into something beneficial rather than destroying.

Solar Child (2018) is the best example of this situation. Ella and two babies are humanity’s only hope for survival in the deteriorating conditions on Earth in this short story. Because humans are not able to survive if they continue to live in their current form. Therefore, Ella, the new version of humanity, is a living being with many features that destroy many dichotomies. She is a photosaphien which means she has been modified with various plant cells that are taken from the sea:

Ella still needs to eat, but not as much as normal humans. Of course, she also needs to spend plenty of time in the sunshine. She dislikes wearing clothes, but we aren’t sure if this is because it covers her symbionts or is just normal kid behavior. So we compromise, a spaghetti strap dress, but no shoes. (Meyers, 2018)

Ella is a child who, due to her brown skin color, eyes, and forest green freckles, reminds people of the Earth. Her humanity is not diminished by the fact that she is a

genetically modified person. It does not turn her into a monster or a cyborg with a metallic and dangerous outlook. She resembles a younger version of Solaria Grande, a black woman who is a blend of nature and technology. Ella is also shown in an almost Edenic setting, similar to Solaria Grande, who creates gardens around her while walking. Ella lives beneath a transparent dome surrounded by fruit trees. When the reader first sees her, she appears on the top of an apple tree. As a result, she is the new Eve. This situation also demonstrates that in Solarpunk stories, there is no distinction between mythology, spirituality, religion, science, and technology. Unlike the stories in the first anthology, genetic engineering or any other form of body modification is not depicted in a frightening or gothic light. Technology and science are not depicted as fields that are independent and incompatible with nature and humans, or as if they are going to destroy humanity and the Earth. But rather they are shown as fields that are in harmony with nature and human beings.

Solarpunk technology is about more than just renewable, sustainable, and clean technological advancements. That would be a very superficial point of view otherwise. Although it may appear fantastic (the genres of fantasy and science fiction are entwined in Solarpunk), technological creations are treated as living beings with a positive outlook which reminds Steampunk's heritage to the subgenre. The machines that are created in the narratives live and die. Therefore, the nature/technology dichotomy is destroyed not only through humans and posthumanism but also through other beings and creations. In the same story, Ella and the twins are not the only creations. Solarsaurs are mechanical pterodactyls who, like Ella, get their energy from the Sun. Even though these beings are created as environmentally friendly vehicles, they develop animal behaviors over time.

Another example of a machine that develops a living being's behaviors is the Ailanthus from *Heavenly Dreams of Mechanical Trees* (2018) by Wendy Nickel. She is a mechanical tree that has daily "philosophical ponderings" about life and being alive (Nickel, 2018). Bitu, a botanist who has to take care of mechanical trees and hates them because they are not real and alive, is the first and only one who notices Ailanthus. When she places her hand on the trunk and hears a voice. Similar to the previous narrative, Ailanthus' philosophical ponderings are religious in essence, she compares herself with the trees in the Garden of Eden and wants to be "her kind's

Eve”, be a mother, and “give life” (Nikel, 2018). Considering that Ailanthus means tree of gods or heaven, this is an expected situation. She searches the soil with her roots to find a seed, which is a rare thing. Finally, before dying just like a real tree, Ailanthus communicates with other trees and asks them to look for seeds as well. Bitá discovers a broken acorn in amber near her roots when the tree dies.

Acorn and amber are symbols of the birth, death, and rebirth cycle. They are a promise that life will flourish and lands will be fertile again. The association of a machine with such a divine purpose, with creation, means that technology is not an extension of nature but also acts like it. Just like in most of the Solarpunk stories, technology’s association with death and destruction is deconstructed.

The last short story to be analyzed is *Fyrewall* (2018) by Stefani Cox. Daesha, the protagonist, is one of many examples that show that, unlike Cyberpunk, everyone in Solarpunk is capable of understanding technology regardless of their race, age and gender. Because hierarchy in science and technology should be eliminated to break dualistic schemes. Democracy is the value that is emphasized in such a situation.

Daesha, a black girl, lives in Los Angeles which is covered by a dome named Fyrewall. It is “a blue, shimmering sheet of compressed oceanwater” that the girl’s grandmother engineered and it protects the city from huge fires (Cox, 2018). It is also a sustainable energy source. Again, just like other Solarpunk cities, Los Angeles is a city where high technology meets with nature. However, what is important is the girl’s connection with the dome. She feels it through her senses and when a crack occurs, she becomes the first one who notices it. After her grandmother, she takes the job to control, protect and fix it. So, while she is trying to find a way to fix the crack, she realizes that it fixes itself. Half organic, half mechanic, this creation evolves over time and learns how to adapt to environmental conditions. It actually develops consciousness and uses fires to heal itself. Daesha finds this new creation beautiful. Technology, like nature, can show regenerative aspects.

By beginning and ending the close reading and analysis of Solarpunk narratives with technology, the importance of the thought system that produces and uses it is emphasized. While technology harms both people and nature in the presence of capitalist, patriarchal, and dualist thoughts, it becomes a useful element in a system

that embraces a critical, punk approach that accepts diversity and plurality, emphasizes collective action, and the interconnectedness of species, and rejects dualistic thinking.

Although there is no detailed analysis of dualistic schemes in the previously analyzed stories, all of these techniques that are mentioned for breaking down the schemes are used in almost every Solarpunk narrative. To summarize, these techniques consist of selecting protagonists from any person on the planet and destroying all other oppositions, particularly the technology/nature opposition, by presenting them in harmony. These are not techniques that are originally developed by Solarpunk. With the ecofeminist and New Wave movements, they have entered the sci-fi genre. However, in the long history of sci-fi, the use of these techniques has been extremely limited, and they have faded quickly as old schemes and subjects resurfaced. As a result, the emergence of Solarpunk and the re-application of these techniques has become a necessity. Solarpunk has thus reinforced the ecofeminist values it adopted in its intellectual development by incorporating them into its narratives, while also challenging both old and new sci-fi narratives by primarily focusing on changing the genre's discourse.

CONCLUSION

Solarpunk is a relatively new subgenre in terms of sci-fi. As a result, academic research on the subject is scarce. Thus, this thesis was written to deepen the analysis of these hopeful narratives about future societies and to contribute academically to the subgenre, which is still in its early stages of development. Much of the academic writing on the subgenre has focused on its predominant environmentalist aspect, so its ecofeminist aspect has either been overlooked or has yet to be noticed. However, if one compares the first to the last anthology, it becomes clear that Solarpunk narratives have begun to adopt a more ecofeminist stance, and this situation should be highlighted.

The historical development of sci-fi should be examined to analyze this adoption in the subgenre. The first thing to notice at this point is that male and, in particular, white authors have dominated the genre since its inception. Unfortunately, this creates a paradox within the genre that is difficult to resolve. As a genre of innovations, possibilities, and alternatives, sci-fi is a type of narrative that can positively change societies, the course of history, and the future. However, individuals of the limited author scale invariably incorporate their thoughts that belong to the patriarchal system into their narratives. They make sci-fi a genre that maintains and even strengthens the existing order which creates inequalities in social order and harms nature.

For a long time, the vast majority of people who fall into the Other category of society, such as women, people of color, people with different sexual identities, and many more were excluded from the genre, and as a result, the genre was unable to change its existing discourse. This discourse portrays the Other group as primarily alien or technologically and scientifically illiterate. They could only exist in the predictions made about future societies as shallow characters who could not go beyond stereotypes. Nature, in these narratives, is also presented as a place open to destruction, and this destruction is mostly unavoidable.

With the collapse of the social order, the image of utopian places that can never be found, and space travel, an impossible dream until the 1960s, have become the most popular options both in peoples' imaginations and narratives. Of course, another

possibility is that a hero will appear and save everyone. In other words, there is a general sense of helplessness and passivity. Following the broad dissatisfaction caused by the war years utopian thinking vanished and progressively dystopian tales evolved. These new darker narratives were sometimes used as a warning and other times deepened the fears of people and resulted in a desperate acceptance.

However, in the 1960s and 1970s, new counter-movements emerged in philosophy such as ecofeminism, and in sci-fi such as the New Wave, have begun a period of change. The lacks in the genre were highlighted with the inclusion of female authors. Most of their contributions were to utopian narratives. Utopias were reinterpreted with a critical view. It was attempted to dispel the atmosphere of intense despair. Narratives were written with more emphasis on social issues. Thus, the stagnation of the utopian genre was tried to be destroyed by reviving its potential with critical thinking and deconstructive discourses. Sci-fi was resurrected. Many aspects of the patriarchal order, particularly the dualist thought system, were criticized and changed in these new, feminist futures. As a result, the readers were shown that another world could exist and that everyone should take action for it.

However, the old discourse was so effectively resurrected in the 1980s that the impact of these movements and call for change began to fade. Cyberpunk, a subgenre of sci-fi that makes the most effective and perhaps most accurate predictions, has annihilated the efforts of the two previous decades. Cyberpunk has become a self-fulfilling prophecy. While taking the punk attitude to its extreme, and predicting a near future where miserable lives coexist with the prevalence of high technology, the greatest harm was that it resurrected the technology/nature dichotomy along with other related dichotomies. Although tried to be a critical subgenre, it damaged the sci-fi and created the same paradox that had been resolved.

Still, it is an important subgenre because, thanks to its unique nature, it pioneered other punk subgenres such as Steampunk and Dieselpunk. These subgenres have adopted a more escapist attitude as a result of their ancestors' extreme negativity. As a result, they failed to fully realize the punk attitude's true potential and could not provide enough critical perspective and dynamism for the desired change that they seek.

This is why, in the twenty-first century, the footsteps of the old resistance have begun to be heard again under the name Solarpunk. People wanted to express their dissatisfaction with the increasing atmosphere of despair and denial, and they called themselves solarpunks. They used sci-fi as a form of activism in the same way that ecofeminists did. They created the content of their discourse by blending many countermovements and countercultures that have been created them, and environmentalism and social justice issues dominated this synthesis. They returned the punk attitude to its essence by realizing its eclectic, open, creative, and flexible nature. In this way, it has become a direct action-based movement. They explain that their demeanor includes joy, warmth, and optimism by putting Solar before the punk suffix. At the same time, through a mythological analysis, it is understood that they reenact the forgotten Sun Goddess in sci-fi and add a feminist tone to the genre's discourse.

Solarpunk is an effective narrative and movement for the change that is desired to be seen both in sci-fi and in the world because it emphasizes plurality and diversity. This subgenre also emphasizes effort and process, particularly as an opposite to "Inevitable Final" discourse. It does not look for places to escape that do not exist. It defends the necessity of social evolution. As a result, the majority of Solarpunk stories are critical utopias that encourage people to think critically and take action. It broadens the readers' horizons, assisting them in breaking free from patterns and attempting to instill them Solarpunk sensibility and techno-optimism. The values that give rise to this sensibility are similar to those of ecofeminism, such as compassion, care, equality, support, unity, community, and so on.

When the short stories in the anthologies are examined to better understand Solarpunk and identify the ecofeminist elements in it, it is seen that these stories adopt a dark and gothic tone at first. Because the purpose of these narratives, which are also transitional works, is to warn and demonstrate to their readers how important and necessary it is for them to change their minds, perspectives, and lifestyles. If this change does not occur, widespread use of environmental technologies will not go beyond exposing dangers such as green capitalism. Instead, it will increase environmental destruction and social injustice. However, as time went on, the tone of the narratives began to brighten. Values such as the importance of being a part of a community, the value of kinship, and the interconnectedness of human, non-human,

and more-than-human beings have made narratives increasingly ecofeminist. The authors aimed to eliminate the concept of master and inequalities within the dualistic mindset. They have included ecofeminists' solutions and values for a better world, such as self-sufficient societies and creative thinking, in their critical utopias.

Solarpunk takes action to make the world a better place in both the present and the future, with real-life actions and narratives depicting future societies. Its radical attitude can be seen not only in literature, but also in many other fields such as physics, biology, engineering, architecture, politics, art, sociology, and design. Therefore, Solarpunk is a very convenient and fruitful movement for academic works. Because it is still in its development phase, every narrative written, every analysis performed, and every technology invented advances the movement's dynamics in a positive direction.

As can be seen, the principles in its intellectual development could not fully manifest themselves in the first place. But gradually these principles became more evident with the contributions of various authors from various parts of the world. In addition, the ecofeminist principles that are implicitly integrated into the intellectual development process, have become more emphasized. Emphasizing these principles and making them explicit in the narratives of Solarpunk, is the most effective method to plant the seeds of hope in our world, a planet that has been ruled by patriarchy for a long time.

REFERENCES

- Allan, K. (Ed.). (2013). *Disability in Science Fiction: Representations of Technology as Cure*. New York: Palgrave Macmillan.
- Amyett, L. (2011). The Philosophy of Dieselpunk. *Gatehouse Gazette (Jazz Edition)*, 17, 10–11.
- Asimov, I. (1981). *Asimov on Science Fiction*. New York: Doubleday.
- Balwit, A. (2021). Vladivostok. In D. Cleland, N. Tamura, C. Rupperecht, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.
- Barnhart, D.K., and Metcalf, A. A. (1997). *America in So Many Words: Words That Have Shaped America*. Boston/New York: Houghton-Mifflin Trade and Reference.
- Beer, D. (2014). *Punk Sociology*. London: Palgrave Pivot. <https://doi.org/10.1057/9781137371218.0001>.
- Bui, K. V. (2021). Deer, Tiger, and Witch. In C. Rupperecht, D. Cleland, N. Tamura, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.
- Butkute, R. (2018). *Solarpunk stories of inclusive societies depict an ideal future for everybody*. KINDER. Retrieved from <https://bit.ly/3GWPjIM>. 25.10.2021.
- Cabello Gallego, S. (2015). *Dieselpunk : una distopía en art decó*. (Unpublished Final Degree Project). Seville: University of Seville.
- Cade, O. (2021). The Streams Are Paved With Fish Traps. In C. Rupperecht, D. Cleland, N. Tamura, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.

Callenbach, E. (2004). *Ecotopia 30th Anniversary Edition*. Berkeley: Banyan Tree Books.

Cassauwers, T. (2018). *SCI-FI DOESN'T HAVE TO BE DEPRESSING: WELCOME TO SOLARPUNK*. OZY. <https://www.ozy.com/the-new-and-the-next/sci-fi-doesnt-have-to-be-depressing-welcome-to-solarpunk/82586/>.

Cavallaro, D. (2001). *Cyberpunk & Cyberculture: Science Fiction and the Work of William Gibson*. London/New Jersey: The Athlone Press.

Chandra Mondal, G., & Majumder, P. (2019). Ecofeminism: Encouraging Interconnectedness with Our Environment in Modern Society. *American Journal of Educational Research*, 7(7), 482–484. <https://doi.org/10.12691/education-7-7-7>.

Chougule, R. (2015). TECHNOPHOBIA OR TECHNOPHILIA? : A STUDY OF CYBERPUNK SCIENCE FICTION. *AvantGardeJournals*, 1–4.

Commando Jugenstil & Tales from the EV Studio. (2018). Midsummer Night's Heist. In S. Ulibarri (Ed.), *Glass and Gardens: Solarpunk Summers*. Albuquerque: World Weaver Press.

CommandoJugendstil, Garforth, L., Helgason, T., and Lu Linvega, D. (26.06.2021). *Exploring Solarpunk* [Panel Discussion]. Solarpunk Day: A Two-Part Panel on Hopeful Sci-Fi, London, England.

Cox, S. (2018). Firewall. In S. Ulibarri (Ed.), *Glass and Gardens: Solarpunk Summers*. Albuquerque: World Weaver Press.

Crowther, K. (2016). From Steam Arms to Brass Goggles: Steampunk, Prostheses, and Disability. In R. A. Bowser & B. Croxall (Eds.), *Like Clockwork: Steampunk Pasts, Presents, and Futures*, 73–97. Minneapolis/ London: University Of Minnesota Press.

Cucu, V. A. (2021). Iron Fox in the Marble City. In C. Rupprecht, D. Cleland, N. Tamura, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.

Dutra, D. I. (2018). Gary Johnson. In G. Lodi-Ribeiro & F. Fernandes (Eds.), *Solarpunk: Ecological and Fantastical Stories in a Sustainable World*. Albuquerque: World Weaver Press.

Dyens, O. (2000). Cyberpunk, Technoculture, and the Post-Biological Self. *CLCWeb: Comparative Literature and Culture*, 2(1), 1-10. <https://doi.org/10.7771/1481-4374.1061>.

Elias, A. J. (2015). Cyberpunk, Steampunk, Teslapunk, Dieselpunk, Salvagepunk: Metahistorical Romance and/vs the Technological Sublime [E-book]. Editor G. Episcopo, *Metahistorical Narratives & Scientific Metafictions A CriticalInsight into the Twentieth-Century Poetics*, 201–220. Napoli: Cronopio.

Emerson, R. W. (2001). *Essays, First Series* (T. Adam & D. Widger, Eds.) [E-book]. The Project Gutenberg.

Errickson, A. (1999). *A Detailed Journey into the Punk Subculture: Punk Outreach in Public Libraries*. (Master Paper). North Carolina: University of North Carolina at Chapel Hill. <https://doi.org/10.17615/jaa5-ww88>.

Esser, H. (2019). Uncanny Retrofuturism and Urban Otherness Victorian London as Steampunk Cyber-City. *Otherness: Essays and Studies*, 7(1), 141-169.

Flynn, A. (2014). *Solarpunk: Notes toward a manifesto*. Hieroglyph. Retrieved from <https://hieroglyph.asu.edu/2014/09/solarpunk-notes-toward-a-manifesto/>. 12.06.2021.

Gaard, G. (1993). Living Interconnections with Animals and Nature [E-book]. In *Ecofemisinm*. 1–12. Philadelphia: Temple University Press.

Gaard, G., and Gruen, L. (1993). Ecofeminism: Toward Global Justice and Planetary Health. *Society and Nature*, 2(1), 234–257. Retrieved from <https://bit.ly/3xg8bir>, 12.05.2021.

Garforth, L. (2017). *Green Utopias: Environmental Hope Before and After Nature*. Croydon: Polity.

Grillmayr, J. (2020). Posthumanism(s). In A. McFarlane, G. J. Murphy, & L. Schmeink (Eds.), *THE ROUTLEDGE COMPANION TO CYBERPUNK CULTURE*, 273–282. New York: Routledge.

Garland-Thomson, R. (2002). Integrating Disability, Transforming Feminist Theory. *NWSA Journal*, 14(3), 1-32. Retrieved from <http://www.jstor.org/stable/4316922>.

Haraway, D. J. (2016). *A Cyborg Manifesto: Science, technology, and Socialist-Feminism in the Late Twentieth Century*. University of Minnesota Press.

Haraway, D. (2015). Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin. *Environmental Humanities*, 6(1), 159–165. <https://doi.org/10.1215/22011919-3615934>.

Hollinger, V. (2020). Ecology in Anthropocene. In A. McFarlane, G. J. Murphy, & L. Schmeink (Eds.), *THE ROUTLEDGE COMPANION TO CYBERPUNK CULTURE*, 326–335. New York: Routledge.

Hunt, J. R. (2021). In Two Minds. In C. Rupprecht, D. Cleland, N. Tamura, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.

Jacobi, J. (1964). Symbols in an Individual Analysis. In C. G. Jung & M. L. von Franz (Eds.), *Man and his Symbols*. 272–304. New York: Doubleday.

James, E. (2003). The Cambridge Companion to Science Fiction (Cambridge Companions to Literature). In E. James & F. Mendlesohn (Eds.), *Utopias and anti-utopias*, 219–230. Cambridge University Press.

Johnson, I. (2020). “Solarpunk” & the Pedagogical Value of Utopia. *Journal of Sustainability Education*, 23, 1-16.

Kemmerer, L. A. (2011). *Sister Species: Women, Animals, and Social Justice*. Urbana: University of Illinois Press.

Kothari, A., Salleh, A., Escobar, A., Demaria, F., & Acosta, A. (Eds.). (2019). Finding Pluriversal Paths (Introduction). In *Pluriverse: A Post-Development Dictionary*, xxi–xl. New Delhi: Tulika Books.

Lavender, I. (2020). Critical Race Theory. In A. McFarlane, G. J. Murphy, & L. Schmeink (Eds.), *THE ROUTLEDGE COMPANION TO CYBERPUNK CULTURE*, 308–317. New York: Routledge.

Lavender, I. (2011). *Race in American Science Fiction*. Indiana: Indiana University Press.

Lavigne, C. (2008). *Mirrorshade Women: Feminism and Cyberpunk at the Turn of the Twenty-first Century*. (Doctoral Dissertation). Montréal: Department of Art History and Communication Studies of McGill University.

Lenhardt, C. (2020). Indigenous Futurisms. In A. McFarlane, G. J. Murphy, & L. Schmeink (Eds.), *THE ROUTLEDGE COMPANION TO CYBERPUNK CULTURE*, 344–353. New York: Routledge.

Leonard, E. A. (2003). The Cambridge Companion to Science Fiction (Cambridge Companions to Literature). In E. James & F. Mendlesohn (Eds.), *Race and ethnicity in science fiction*, 253–264. Cambridge University Press.

Marchetto, S. (2001). *Tune in, turn on, go punk: American punk counterculture, 1968–198*. (Unpublished Master Dissertation). Calgary: University of Calgary. <https://doi.org/10.11575/PRISM/15837>.

Marçal, T. (2018). When Kingdoms Collide. In G. Lodi-Ribeiro & F. Fernandes (Eds.), *Solarpunk: Ecological and Fantastical Stories in a Sustainable World*. Albuquerque: World Weaver Press.

Mcfarland, M. (2021). Old Man's Sea. In C. Rupprecht, D. Cleland, N. Tamura, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.

Mendlesohn, F., & James, E. (Eds.). (2003). *The Cambridge Companion to Science Fiction (Cambridge Companions to Literature)* [E-book]. Cambridge University Press.

Merchant, C. (1983). *The Death of Nature: Women, Ecology, and the Scientific Revolution*. San Francisco: Harper & Row.

Merrick, H. (2003). The Cambridge Companion to Science Fiction (Cambridge Companions to Literature). In E. James & F. Mendlesohn (Eds.), *Gender in science fiction*, 241–253. Cambridge University Press.

Meyers, C. (2017). Solar Child. In P. Wagner & B. Wieland (Eds.), *Sunvault: Stories of Solarpunk and Eco-Speculation*. Upper Rubber Boot Books.

Micale, J. R. (2002). *Strange new worlds: Ecofeminism and science fiction*. (Published Doctoral Dissertation). New Jersey: Drew University. <https://bit.ly/3NSzTaK>, 05.06.2021.

Mignolo, W. D. (2018). On Pluriversality and Multipolarity (Foreword). In B. Reiter (Ed.), *Constructing the Pluriverse: The Geopolitics of Knowledge*. Durham and London: Duke University Press.

Mok, D. K. (2018). The Spider and the Stars [E-book]. In S. Ulibarri (Ed.), *Glass and Gardens: Solarpunk Summers*. Albuquerque: World Weaver Press.

Monaghan, P. (1990). "She Want It All": The Sun Goddess in Contemporary Women's Poetry. *Frontiers: A Journal of Women Studies*, 11(2/3), 21-25. doi:10.2307/3346817.

Morgan, A. (Director). (2015). The True Cost [Documentary]. Life is My Movie Entertainment.

Moylan, T. (2000). *Scraps Of The Untainted Sky*. Colorado: Westview Press.

Moylan, T. (2014). *Demand the Impossible: Science Fiction and the Utopian Imagination* (R. Baccolini, Ed.). Switzerland: Peter Lang AG, Internationaler Verlag der Wissenschaften.

Mullaney, C. (2019). *Disability Studies: Foundations & Key Concepts*. JSTOR Daily. <https://daily.jstor.org/reading-list-disability-studies/>.

Nacino, J. F. (2021). Mariposa Awakening. In C. Rupprecht, D. Cleland, N. Tamura, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.

Nevins, J. (2020). Steampunk. In A. McFarlane, G. J. Murphy, & L. Schmeink (Eds.), *THE ROUTLEDGE COMPANION TO CYBERPUNK CULTURE*, 64–73. New York: Routledge.

Nikel, W. (2018). Heavenly Dreams of Mechanical Trees. In S. Ulibarri (Ed.), *Glass and Gardens: Solarpunk Summers*. Albuquerque: World Weaver Press.

Older, D. J. (2017). Dust. In P. Wagner & B. Wieland (Eds.), *Sunvault: Stories of Solarpunk and Eco-Speculation*. Upper Rubber Boot Books.

Orsi, C. (2018). Soylent Green is People! In G. Lodi-Ribeiro & F. Fernandes (Eds.), *Solarpunk: Ecological and Fantastical Stories in a Sustainable World*. Albuquerque: World Weaver Press.

Ottens, N. (2011). Dieselpunk Architecture. *Gatehouse Gazette*, 20, 7–12.

Park, M. (2011). Fighting “Other” [E-book]. In L. Kemmerer (Ed.), *Sister Species: Women, Animals and Social Justice*, 79–87. Urbana: University of Illinois Press.

Patt, J. K. (2018). Caught Root. In S. Ulibarri (Ed.), *Glass and Gardens: Solarpunk Summers*. Albuquerque: World Weaver Press.

Pearson, W. (2003). The Cambridge Companion to Science Fiction (Cambridge Companions to Literature). In F. Mendlesohn & E. James (Eds.), *Science fiction and queer theory*, 149–163. Cambridge University Press.

PETA. (2021). *Facts and Statistics About Animal Testing*. <https://bit.ly/3zhu9D5>, 12.06.2021.

Pho, D. M. (2016). Punking the Other: On the Performance of Racial and National Identities in Steampunk. In R. A. Bowser & B. Croxall (Eds.), *Like Clockwork: Steampunk Pasts, Presents, and Futures*, 127–153. Minneapolis/ London: University Of Minnesota Press.

Piecraft. (2009). Diesel Classics. *Gatehouse Gazette*, 4, 16–22.

Plumwood, V. (1993). *Feminism and the Mastery of Nature* [E-book]. London/ New York: Routledge.

Primoratz, I. (2020). *Patriotism*. The Stanford Encyclopedia of Philosophy. <https://plato.stanford.edu/entries/patriotism/>.

Querejazu, A. (2016). Encountering the Pluriverse: Looking for Alternatives in Other Worlds. *Revista Brasileira de Política Internacional*, 59(2), 1–16. <https://doi.org/10.1590/0034-7329201600207>.

Razaghi, T. (2019). *Exploring Ecotopian Futures: Solarpunk Narratives and their Multifaceted Modes of Engagement*. (Master Dissertation) Graz: University of Graz.

Rieder, J. (2009). Fiction, 1895-1926 [E-book]. In M. Bould, A. M. Butler, A. Roberts, & S. Vint (Eds.), *The Routledge Companion to Science Fiction*, 23-32. Oxon: Routledge.

Rivera, L. M. (2019). *Negotiating the Boundaries of Solarpunk Literature in Environmental Justice*. (Senior Project). Washington: Western Washington University.

Rivero, A. P. V. (2020). *Politics of the Sun The Pre-Colonized Sun Goddess and the Sun Empire-Building*. (Master Dissertation). Iceland: University of Iceland.

Reina-Rozo, J. (2021). Art, energy, and technology: the Solarpunk movement. *International Journal of Engineering, Social Justice and Peace*, 8(1), 55-68, <https://doi.org/10.24908/ijesjp.v8i1.14292>.

Roberts, A. (2006). *The History of Science Fiction*. New York: Palgrave Macmillan.

Roberts, A. (2009). The Copernican Revolution [E-book]. In M. Bould, A. M. Butler, A. Roberts, & S. Vint (Eds.), *The Routledge Companion to Science Fiction*, 3-13. Oxon: Routledge.

Roshak, N. R. M. (2021). By the Light of the Stars. In C. Rupprecht, D. Cleland, N. Tamura, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.

Rossmann, J. L. (2018). Riot of the Wind and Sun. In S. Ulibarri (Ed.), *Glass and Gardens: Solarpunk Summers*. Albuquerque: World Weaver Press.

Rupprecht, C., Cleland, D., Tamura, N., Chaudhuri, R., & Ulibarri, S. (Eds.). (2021). Introduction. *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.

Scherrer, D. (n.d.). *Solar Folklore and Storytelling*. Stanford Solar Center. Retrieved from <http://solar-center.stanford.edu/folklore/Solar-Folklore.pdf>.

Schuller, W. K. (2019). "Evolution Takes Love:" Tracing Some Themes of the *Solarpunk Genre*. (Master Dissertation). Ontario: Queen's University.

Shiva, V., and Mies, M. (1993). *Ecofeminism*. New York/ London: Zed Books.

Sørensen, B. (1991). A history of renewable energy technology. *Energy Policy*, 19(1), 8-12. [https://doi.org/10.1016/0301-4215\(91\)90072-v](https://doi.org/10.1016/0301-4215(91)90072-v).

Spindler, R. (2018). Sun in the Heart. In G. Lodi-Ribeiro & F. Fernandes (Eds.), *Solarpunk: Ecological and Fantastical Stories in a Sustainable World*. Albuquerque: World Weaver Press.

Spires, D. A. X. (2021). The Exuberant Vitality of Hatchling Habitats. In C. Rupprecht, D. Cleland, N. Tamura, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.

Starhawk. (2007). *Starhawk's Vision of San Francisco*. Starhawk. <https://starhawk.org/writing/books/starhawks-vision-of-san-francisco/>.

Stecyk, K. L. (2017). Trees in Between. In P. Wagner & B. Wieland (Eds.), *Sunvault: Stories of Solarpunk and Eco-Speculation*. Upper Rubber Boot Books.

Suvín, D. (1979). *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*. New Haven: Yale University Press.

Taneja, S. (2021). The Songs that Humanity Lost Reluctantly to Dolphins. In C. Rupprecht, D. Cleland, N. Tamura, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.

The Solarpunk Community. (n.d.). *A Solarpunk Manifesto*. Regenerative Design. Retrieved from <https://www.re-des.org/a-solarpunk-manifesto/>.

Ulibarri, S., Wagner, P., Fernandes, F., Verso, F., and Cruz, V. (26.06.2021). *Writing Solarpunk* [Panel Discussion]. Solarpunk Day: A Two-Part Panel on Hopeful Sci-Fi, London, England.

VanderMeer, J., and Chambers, S. J. (2011). *The Steampunk Bible: An Illustrated Guide to the World of Imaginary Airships, Corsets and Goggles, Mad Scientists, and Strange Literature* [E-book]. China: Abrams.

Von Storch, H., and Stehr, N. (2006). Anthropogenic Climate Change: A Reason for Concern since the 18th Century and Earlier. *Geografiska Annaler. Series A, Physical Geography*, 88(2), 107-113. Retrieved from <http://www.jstor.org/stable/3878357>, 13.04.2021.

Wagner, P. (2021). Children of Asphalt. In C. Rupprecht, D. Cleland, N. Tamura, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.

Watson, T. X. (2017). The Boston Hearth Project. In P. Wagner & B. Wieland (Eds.), *Sunvault: Stories of Solarpunk and Eco-Speculation*. Upper Rubber Boot Books.

Williams, R. (2019). Powering the Future: Energy Resources in Science Fiction and Fantasy. *Open Library of Humanities*, 5(1), 1-35. <https://doi.org/10.16995/olh.329>.

World Health Organization. (2021). *Soaring e-waste affects the health of millions of children, WHO warns*. <https://www.who.int/news/item/15-06-2021-soaring-e-waste-affects-the-health-of-millions-of-children-who-warns>, 12.06.2021.

Yam, T. (2021). Untamed. In C. Rupprecht, D. Cleland, N. Tamura, R. Chaudhuri, & S. Ulibarri (Eds.), *Multispecies Cities: Solarpunk Urban Futures*. Albuquerque: World Weaver Press.

Yarman, T. (2011). A cosmically whole ethical system: How to attain a sustainable energy consumption and development, and a most stable world peace?. *Scientific Research and Essays*, 6(4), 928–932. <https://doi.org/10.5897/SRE10.1047>.

Young, A. M. (2014). “*More Human than Human.*” *Race, Culture, and Identity in Cyberpunk*. (Master Dissertation). Iceland: School of Humanities of University of Iceland.