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21st Century Novels in the Light of Ecocriticism: Paolo Bacigalupi's *The Windup Girl* and Kazuo Ishiguro's *Klara and the Sun*

Master's Thesis

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ABSTRACT

Twenty first century novels address ecological issues through speculative and dystopian narratives. This thesis examines representations of nature, the human and nature relationship, and how technological developments transform human nature in Paolo Bacigalupi's *The Windup Girl* and Kazuo Ishiguro's *Klara and the Sun*, both of which can be considered within this category, from an ecocritical perspective. In the twenty first century dominated by the Anthropocene mindset, the reconfiguration of this concept, the transformation of nature into a subject, and the relationship between technology, nature, and humanity are discussed from an ecocritical standpoint. This thesis explores how technological advancement in contemporary literature affects the relationship between nature and human, and how the boundaries between the artificial and the natural become increasingly blurred. By analyzing the representations of nature and technology in these novels in relation to human environmental responsibility and ethical positioning, this thesis aims to reveal the critical responses contemporary literature offers to the environmental crisis. In this context, it concludes that in both novels, nature is not merely a background element, but a central, meaning-producing component that significantly influences character development. The depiction of the nonhuman environment as an active subject aligns with the ecocritical approach. In both works, genetic modifications symbolize the alienation of the human body from nature and its transformation into an object serving solely the interests of the Anthropocene. This thesis contributes to the field of ecocriticism by addressing the human and nature relationship both through physical consequences and through cultural, technological, and individual dimensions.

Keywords: ecocriticism, 21st century literature, Anthropocene, *The Windup Girl*, *Klara and the Sun*

EKOELEŞTİRİ IŞIĞINDA 21. YÜZYIL ROMANLARI: PAOLO BACIGALUPI’NİN KURMA KIZ’I VE KAZUO ISHIGURO’NUN KLARA İLE GÜNEŞ’İ

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ÖZET

Yirmi birinci yüzyıl romanları, ekolojik sorunları spekülâtif ve distopik kurgular aracılığıyla ele almaktadır. Bu tez, bu kategoride değerlendirilebilecek Paolo Bacigalupi’nin *Kurma Kız* ve Kazuo Ishiguro’nun *Klara ile Güneş* romanlarında, doğa temsillerini, insan-doğa ilişkisini ve teknolojik gelişmelerin insan doğasını nasıl dönüştürdüğünü ekoeleştirel bir perspektiften incelemektedir. Antroposen, yani insan çağı, anlayışın hâkim olduğu yirmi birinci yüzyılda, bu kavramın yeniden şekillenmesi, doğanın bir özneye dönüşmesi, teknoloji, doğa ve insan arasındaki bağ ekoeleştirel bir açıdan tartışılmıştır. Bu çalışmada, çağdaş edebiyatta teknolojik ilerlemenin doğa ile insan arasındaki ilişkiyi nasıl etkilediği ve yapay ile doğal arasındaki sınırların nasıl bulanıklaştığı incelenmiştir. Bu tez, söz konusu romanlardaki doğa ve teknoloji temsillerini, insanın çevresel sorumluluğu ve etik duruşu bağlamında değerlendirerek, çağdaş edebiyatın çevre krizine verdiği eleştirel yanıtları ortaya koymayı amaçlamıştır. Bu bağlamda, her iki romanda da doğanın yalnızca arka planda kalan bir unsur değil, anlatının merkezinde yer alan, anlam üreten ve karakterlerin dönüşümünü etkileyen bir öge olduğu sonucuna ulaşılmıştır. İnsan-dışı çevrenin romanlarda aktif bir özne haline getirilmesi de ekoeleştirel yaklaşımla örtüşmektedir. Her iki romanda da genetik müdahaleler, insan bedeninin doğadan kopuşunu ve Antroposen dönemin çıkarlarına hizmet eden bir nesneye dönüşmesini temsil etmektedir. Bu çalışma, doğa ve insan ilişkisini yalnızca fiziksel sonuçlar üzerinden değil; kültürel, teknolojik ve bireysel boyutlarıyla da ele alarak ekoeleştiri alanına katkı sağlamaktadır.

Anahtar Kelimeler: ekoeleştiri, 21. yüzyıl edebiyatı, antroposen, *Kurma Kız*, *Klara ile Güneş*

DEDICATION

This thesis is dedicated to all living beings who have lost their lives in forest fires in our country, from those rooted beneath the soil to those soaring through the skies...



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1. INTRODUCTION

Human beings have always depended on nature for survival, while simultaneously engaging in a continuous effort to understand, control, and reshape it. However, throughout history, attempts to dominate nature have invariably resulted in adverse consequences for humankind. By going against the laws of nature, humankind prepares its own end and damages itself. This damage can be brought on by any of the material or non-material agents that man uses to control his natural environment (Toska, 2013). From mythological narratives to historical accounts, the relationship between humans and nature has frequently been depicted. The biblical story of Adam eating the forbidden apple, for instance, can be interpreted as one of the earliest representations of mankind's rebellion against the natural order. Erdal states that "eating the forbidden fruit that may be regarded as a symbol of nature's balancing element, Adam knew he had to become more reconciled with nature and more cautious of his relationship with the environment" (2016, p. 10). Such myths symbolically reflect the idea that every violation of ecological balance is met with natural retaliation. The eternal battle between mankind and nature often concludes with the triumph of nature and the defeat of human ambition. With the simplest example, damaging the vegetation on the slopes and destroying the trees in these areas return to mankind as natural disasters such as avalanches, landslides and floods. While some societies have sought to dominate nature, others have chosen coexistence and adaptation. In ancient Egyptian civilization, humanity sought a solution to the flooding of the Nile River and lived in harmony with nature, thus, to calculate the time of the flood, the Egyptians created a calendar. "Nature divided his [primitive man in Egypt] year into three well-defined seasons – Flood, Spring, and Low Water or Harvest, with the Flood Season, following the hardship of the Low Nile, the obvious starting point for each annual cycle" (Winlock, 1940, p. 447). Thus, Egyptians both increased the fertility of the soil and made scientific progress. Instead of fighting against nature, understanding it and turning to a solution brought a magnificent prize to the Egyptian civilization. In its deep message, waging war against nature ends with the sorrow of mankind; instead of being in the centre of the universe, mankind should accept the supremacy of nature.

In contemporary times, however, this ancient wisdom toward nature has been overshadowed by industrialization, rapid technological development, and the desire to exploit nature. Modern society often prioritizes economic gain over ecological balance which leads to irreversible damage. Forest fires, droughts, overconsumption of energy resources, toxic waste, rising sea levels, air and water pollution and the disruption of ecological chains are just a few of the crises confronting the planet today. These environmental issues, largely triggered by human negligence and exploitation, have become some of the most pressing global concerns. Deepening ecological problems in the twenty-first century extend beyond the scientific and political realms and resonate in the cultural and aesthetic spheres, which necessitates a reconsideration of the conception of nature in literary genres and criticism. Authors, historians, scientists, and artists have begun to reflect these issues in their works by recognizing their responsibility to raise awareness and foster environmental ethics. Literature went beyond reflecting emotions and began to reveal social, political, and environmental realities. Inspired by their surroundings, authors, poets, and playwrights have responded to the growing environmental crisis by addressing ecological themes in their works, highlighting humanity's role in environmental degradation and imagining possible futures shaped by ecological collapse.

This convergence of ecological concern and literary expression gave acceleration to a new field of inquiry in the late twentieth century: ecocriticism. Although the relationship between human beings and nature has been a subject of literature for centuries, the emergence of it as an interdisciplinary field took until the 1990s. Coined as a response to both the environmental crisis and the perceived limitations of traditional literary criticism, ecocriticism, is fundamentally, defined as “the study of the relationship between literature and the physical environment” (Glotfelty, 1996, p. xviii). Rather than treating nature as a mere object, it positions the environment as a central figure worthy of ethical and critical engagement. As a branch of postmodernism that stands out for subverting conventional stereotypes and dichotomies in society, the central concern of ecocriticism is its challenge to long-standing binary oppositions embedded in Western thought, particularly the dichotomy between nature and culture. These oppositions have not only influenced philosophical

and scientific discourse but have also deeply shaped representation in literature. Susan Rowland states:

Importantly, the binary form of nature versus culture is far from alone. Rather it is mapped onto, and bound up with, a whole series of binary oppositions in Western thinking such as God/Man, Masculine/Feminine, Master/Slave, Conscious/Unconscious, and Mind/Body. All these binaries are expressed in human society and arguably could be said to structure it. Historically, one half of the binary was regarded as valuable and productive, the other half as inferior and incapable of generating 'her' own meaning. (2012, p. 5)

These layered and hierarchical dualisms both shape human relations with nature and inform the way literature has historically constructed ecological narratives. Thus, ecocriticism calls for a critical reexamination of such binaries and their cultural implications. In this way, by rejecting the human-centered Cartesian thought, it introduces an Earth-centered approach.

The institutionalization of ecocriticism has accelerated with the establishment of organizations such as The Association for the Study of Literature and Environment (ASLE) and their journal *Interdisciplinary Studies in Literature and Environment* (ISLE) (Tošić, 2006). Names such as Cheryl Glotfelty, Lawrence Buell and Jonathan Bate have laid the theoretical foundations of ecocriticism by putting forward pioneering works in this field. Ecocriticism transcends literary theory and draws on various fields such as ecological science, cultural studies, feminist theory and postcolonialism, therefore it has broadened its theoretical grounding. In this respect, ecocriticism's focus on nature as a representational element in texts and its analysis of the ideological, cultural and historical background of the relationship established with nature have contributed a significant role in transforming literature into an influential medium through which ecological sensitivity is produced and environmental awareness is constructed.

According to the study by Usman and Anis, "Twenty-first-century literature has an important role in shaping ecological awareness and promoting conservation actions" (2025, p. 6). Contemporary twenty-first-century literature does not only treat

ecological crises as a theme; it calls for rethinking the human relationship with nature on structural, ethical and ontological planes. Climate fiction texts address the effects of the climate crisis through individual lives and social structures and aim to generate ecological consciousness by presenting alternative scenarios for the future. “Propelled by this ever-growing ecological consciousness that climate change and other irreversible phenomena have created in our daily lives, authors and writers are already documenting this state of emergency that society has reached” (Alonso and Traseira, 2019, p. 147). Thus, twenty-first-century literature constructs a new language of representation that extends beyond anthropocentric narrative structures and grants subjectivity to nonhuman beings, natural cycles and ecosystems. In this way, literary texts invite the reader to witness environmental destruction and to question its ethical, political and existential implications.

Twenty-first-century authors Paolo Bacigalupi and Kazuo Ishiguro have also turned the anthropocentric approach upside down by writing precious novels focusing on environmental awareness, ecosystems, ethics and nonhuman beings. Bacigalupi’s 2009 novel *The Windup Girl* is set in Thailand, in a future where fossil fuels are depleted, genetically modified seeds and bioengineering companies control the world. The novel questions the fragile balance between nature, man and technology in a world shaped by ecological disasters and biotechnological interventions. Ishiguro’s 2021 novel *Klara and the Sun* presents a quieter and more introspective fiction, narrated through the eyes of Klara, an artificial intelligence who was created to company the genetically modified kids. The novel deals with the position of artificial beings against nature and humans in a society where human relationships are redefined through technology. Both novels stand out as narratives that centre ecological sensitivity in twenty-first-century literature by focusing on issues such as nature destruction, nonhuman life forms and the ethical limits of technological interventions. For this reason, these two novels were selected for this thesis, and how the relationship between nature and human beings is reconstructed in twenty-first-century fiction was analyzed in the context of ecocriticism.

Paolo Bacigalupi’s *The Windup Girl* has been the subject of research all over the world. Studies on the novel have often focused on issues such as climate change, posthuman bodies, biopolitics, identity and exploitation. Trexler, for instance, analyzes

the novel's dystopian world set in post-environmental catastrophe Thailand and how it approaches issues such as climate change, genetically modified organisms (GMOs), diseased crops, agricultural monopolies and energy scarcity (2015). On the other hand, Hageman's article "argues that *The Windup Girl* is exceptionally sophisticated and ideologically savvy in its analyses of ecological crises and the challenges of trying to imagine our way out of them" (2012, p. 283). Middleton has offered a biopolitical perspective on the speculative future of *The Windup Girl* (2015). Booker has provided a post-humanist perspective with his article titled A New Expansion: Climate Change, Posthumanism, and the Utopian Dimension in Paolo Bacigalupi's *The Windup Girl* (2023). In theses in Türkiye, Kabak analyzed it from the perspective of political nostalgia (2020) and Atmaca evaluated it from the posthuman perspective together with Atwood's *Oryx and Crake* (2023). Also, Karaman analyzed the impact of the interrelation of ecology and dystopia on the fictionalization process in Ballard's novels and Bacigalupi's novels (2020).

Although *Klara and the Sun* by Kazuo Ishiguro was published in 2021, it has been the subject of many studies, particularly on posthumanism, artificial intelligence and ethics, and transhumanism. Du, in his article, focused on the posthumanist relationships in the novel (2022). In addition, Logotheti examined the relationship between humans and artificial intelligence in a book chapter titled "Mysterious Emotions: The Fear of Artificial Friends in Ian McEwan's *Machines Like Me* and Kazuo Ishiguro's *Klara and the Sun*" (2024). Mejia and Nikolaidis, on the other hand, have addressed the existence of artificial intelligence from a transhumanist perspective (2022). Although there is a thesis titled "The Colonization of AI: An Ecocritical Analysis of Kazuo Ishiguro's *Klara and the Sun*" (Hacioglu, 2023), it contains no resemblance to this study in terms of content and interpretation.

This thesis aims to analyze the representation of nature in twenty-first-century contemporary novels, how the connection between humans and technology affects nature, and how the Anthropocene perspective has changed in this century. In this respect, this thesis uses literary analysis to analyze Paolo Bacigalupi's *The Windup Girl* and Kazuo Ishiguro's *Klara and the Sun* through the lens of ecocriticism. In this thesis, which consists of five chapters including three main chapters, the theoretical framework is given in the second chapter. The foundations of the relationship between

nature and human beings, the place of nature in religions, mythologies and philosophical thoughts are discussed, followed by the definitions, history and aims of ecocriticism. Deep ecology, social ecology and ecofeminism, which are the fields that ecocriticism feeds on, are also explained in this section. In the third chapter, Paolo Bacigalupi's novel *The Windup Girl*, published in 2009, is analyzed from the perspective of ecocriticism. The representation of nature is explored through close readings of quotations from the novel. Similarly, the fourth chapter deals with *Klara and the Sun*, written by Kazuo Ishiguro in 2021. The representation of nature and ecological problems are discussed through the theory of ecocriticism and the quotations in the novel are analyzed through close readings. Finally, in the conclusion part, a general discussion on man and nature is also presented, the analyses of the two novels are summarized and a brief comparison of them is provided.

2. THEORETICAL FRAMEWORK: ECOCRITICISM

This chapter aims to explain the place of nature in the world thought and literature including religion and mythology, briefly. Then, it deals with the definition and history of ecocriticism by providing different explanations as well as their own definitions of theoreticians and critics. Lastly, the thoughts and philosophies which feed ecocriticism such as deep ecology, social ecology and ecofeminism are probed in this chapter.

2.1. The Place of Nature in the World

Nature, which undoubtedly has a great place in human life, has influenced people in terms of religion, philosophy and literature for centuries. It has long inspired philosophers, writers and poets in the history of mankind. For so many years, mankind has not only made this indispensable part of itself the subject of literature and philosophy but has also constantly transformed its view of nature. First and foremost, the long history of nature is based on religion. In many religions, nature is seen as a gift from God while in others, humankind is seen as the ultimate creation and therefore has the right to exploit God's gift. For instance, according to the Bible, man should protect nature, but he also has the right to use it for his own benefit. Also, in the first parts of Genesis, it is uttered that mankind should dominate its nonhuman environment. On the other side, some religions consider that human beings are also part of nature and must live in balance and harmony with it. From the point of these religions, humans have a responsibility to protect the environment, and it should be used in a sustainable way. For instance, Islamic doctrine forbids tampering with or wasting the natural world. It encourages its believers to respect the rights of animals and treat them with compassion. As Yaran states, the idea that nature is, in theory, a sign of God and that it also carries the mark of God via the different variety in oneness that is impossible for humans to observe or fully comprehend is made explicit in numerous verses of the Quran and the Bible (1999, p. 51). While the value of nature is highlighted in the Quran and the Bible, it is emphasized that man is the most valuable and superior being by reason of his possession of will and reason. Thus, this has given rise to the idea of superiority over nature. However, in Buddhism, nature is regarded

as a piece of the human soul and a source of religion. The Buddha's teaching was abstract, and the believers of Buddhism used the richness of natural imagery in metaphors to transmit this teaching (Bloom, 1972, p. 118). In Buddhism, the entire journey of Buddha, from his birth to the moment of his passing, is symbolically associated with the lotus flower, which is also closely linked to the concept of liberation (Tho, 2019, p. 1061).

Mythology, which was used to explain natural events when science was not enough, established a strong bond between human beings and nature. This bond was so strong that the human species personified and deified the sky, the sun, the sea, in other words, every part of nature. Thus, they brought mythological discourses to natural phenomena. For instance, when lightning struck, they associated it with Zeus' temper. As a part of nature, the sky had been viewed as a component of existence that needed compassion and grace since it provided people with fertility or drought, chill or warmth, darkness or light (Yakar, 2018). In this manner, people in ancient times glorified the elements in nature and even reflected their integrated relationship with nature in myths. This has become a symbol of the unbreakable bond between mankind and nature. Also, in different parts of the world, people have divergent mythological characters. Shintoism, which is the indigenous religion of the Japanese people and forms the basis of Japanese mythology, also has many gods and goddesses that can be associated with nature. They have called their deities 'kami' and "they are spirits of ancestors, animals or natural things like waterfalls, trees and even rocks" (Myths of The World, 2022) Japanese people who follow the Shinto religion named these gods establishing a bond with nature and Senda explains these deities as:

...Owatatsumi no kami (Deity of the sea), Amenomikumari no kami (Deity of water), Oyamatsumi no kami (Deity of mountains), Shinatsuhiko no kami (Deity of wind), Kukuchi no kami (Deity of trees), Amenosagiri no kami (Deity of mist and fog), and Amaterasu Omikami, i.e., the sun goddess who occupies the highest position in this system of deities. Thus various deities and nature are completely unified. (1992, p. 131)

The Japanese, like other people around the world, have come to see nature as part of their lives as a result of their local religion and mythology. Their cultural and national identities are inspired by nature as well as are based on nature. Furthermore, Thai mythology is influenced by Buddhism religion, much like Japanese mythology is. The Than spirit, often referred to as the spirit of the sky, is thought by the Thai to have been the first spirit to ever create anything (Mythlok, 2023). In addition to being affected by nature, the Thai people also believed in a combination of animals and humans in their myths such as Garuda which “has a human-like face with a bird-like body” (Syafrony and Suwanpratest, 2016, p. 46). Moreover, they considered some of their gods as guardians of natural occurrences like rivers and forests.

The world’s view of nature is not limited to religion and mythology but can also be traced to philosophy. Considering nature from the point of view of philosophy, from the very first, philosophers have attributed different meanings to nature and its elements. Ancient Greek philosophers were always aware of the fact that everything converts in nature such as change from summer to winter or from day to night. Therefore, they used the power of natural elements to explain natural phenomena. Some said that the most essential component of existence is air, while others contended that water had a special place in the universe. Their thoughts showed that there is an undeniable connection between the nonhuman world and human beings. Many centuries later, nothing has changed, they have still had thoughts and predictions about nature. Humans are inherently equal in both physical and mental capacities in the state of nature, emphasized by Hobbes, who is one of the most significant philosophers of the seventeenth century. (1651, p. 76). However, this equality leads to constant competition, as each individual strives to secure their own survival and safety, resulting in a chaotic and insecure environment. In such a state, the lack of order and the perpetual threat of violence necessitates the creation of a governing authority, which can impose control over nature and establish a social order to ensure peace and security (p. 76). While, according to Hobbes, a natural right to property does not exist since there is neither property nor ownership in the natural world; Locke asserted that humans have a natural right to whatever portion of nature has been touched by human work (Locke and Macpherson, 1980, p. 19). Traces of nature are also seen in science. Darwin’s survival of the fittest has often been underlined; in other words, it is not the

one who dominates nature or is the strongest, rather it is the one who is most in balance with nature that has been able to survive. In fact, this proves the existence of nature in all areas of human beings and even life; for, as it has been repeatedly stated, everything in nature is interconnected with each other.

The view of nature has always been subject to change in history and literature. Many authors, poets and playwrights have been influenced by the nonhuman world. Since the very beginning of literature, nature has offered many different perspectives to literary figures who are curious about their surroundings and see it as the nourishment of their work. At times, the presence of nature has been used to create the most beautiful compliments in a Shakespearean sonnet, like comparing a lover to a summer's day in the eighteenth sonnet; and at other times, the destruction of nature has been portrayed in a dystopian way in contemporary novels. Therefore, as in religions and mythology, the perspective of nature in literature has changed. Medieval man saw nature as part of an order created by God and believed that this order was linked to human existence. Boethius states that "all that is known not through its own nature but through the nature of those who apprehend it" (1999, p. 110), therefore, people can only perceive nature within the framework of their own perceptions and beliefs. Gerrard interprets this as "Taken seriously, such remarks make us aware that our understanding of the world around us and indeed our place in it are contingent upon our own attitudes and prevailing beliefs concerning issues of place and human/nature relations" (2014, p. 28). In Renaissance literature, the relationship between humanity and nature was multifaceted. Renaissance poets were deeply influenced by the more earth-centred spirituality of ancient Greece and Rome, often expressing this reverence through an animistic lens in their poetry (Borlik, 2019, p. 5). On the other hand, Borlik characterizes the Renaissance as an early form of the Anthropocene, viewing this period as "a time when Homo sapiens, like a conquistador planting his banner on newfound shores, asserted its dominion over the earth" (2019, p. 10), marking the beginning of humanity's control over nature in ways that would later define the Anthropocene era.

Later, the tremendous shift from human power to machine power during the Industrial Revolution was a significant turning point for nature. Advancing technology, urbanization, migration from agricultural lands to cities, production and consumption

undoubtedly brought about many undesirable things and left deep traces on nature. According to Steinberg, the Industrial Revolution was a component of a significant ecological reconfiguration, marking a new and significant period in the history of the environment:

The industrial revolution reworked the earth's landscape, altering the foundations of a society based on agriculture and placing it on the road to modern economic development. Humankind's relationship with the natural world was profoundly affected. New sources of energy and technology were developed, different ways of farming and feeding population emerged. (1986, p. 261)

Problems such as deforestation, water and air pollution due to the need for fuel as well as raw materials, and the transition of rural communities to urban life have disrupted the delicate balance of ecosystems and led to environmental destruction. As a result of urbanization and migration, people have become alienated from nature and have begun to view it merely as a source of raw resources. Increasing air pollution and depletion of green areas have led people to react against industrialization from time to time. These responses appeared not just in daily life but also in science and literature.

Kerridge claims that "Romanticism was the great reaction against the philosophical and industrial rationality that had separated humanity from nature" (2006, p. 540). Romantic period poets such as William Blake, who complained that the polluted air in cities was destroying gardens, and Percy Bysshe Shelley, who lamented the contaminated water (Hutchings, 2007, p. 175). Aware of the environmental damage caused by industrialization, Romantic poets saw nature as an escape and sought peace in nature, took refuge in nature more and more with the destruction brought about by industrialization and glorified it. They addressed the sublimating and inherent ties of human beings to nature in their works, reflecting the effects of nature on the spiritual experiences of humans. They used metaphors that were taken from nature and returned to people and the environment in the same way. Since their poetry constantly conveys a profound and enduring interest in Earth as a home for all living things, such a viewpoint may rightfully be referred to as an ecological view of the natural world (McKusick, 2000, p. 29).

As with the movements in English literature, the reflections on nature in American literature made the footsteps of ecocriticism heard from afar. The most remarkable reason for the reflections on nature in American literature is the fact that Americans were more interested in the arts and sciences as a result of the just-ended process of independence (Özgün, 2020). Their interest in art and science was perceived by writers as a rebellion against the destruction of nature, and Henry David Thoreau, Barry Lopez, Rachel Carson and many others have mirrored nature in their works. *Silent Spring*, written by Carson in 1962 and dealing with the haphazard use of chemical biocides, is conceived as the most substantial work of the contemporary environmental movement (Love, 2003). Carson's work, whose topic is "the human poisoning of the biosphere through the wholesale deployment of myriad new 20th-century chemicals aimed at pest and disease control" (Atwood, 2018), is seen as a milestone of modern environmentalism with its emphasis on the destruction of nature and its realistic articulation of the harm of technology to nature.

In this long-term relationship between literature and nature, the destruction of nature by human beings due to the ecological events that continue today and the consequent punishment of nature to human beings have been reflected in literary texts by influenced by theories such as ecofeminism and social ecology. No longer passive observers of the natural world, literature and theory have become active agents in raising environmental consciousness. As Love states, "The most important function of literature today is to redirect human consciousness to a full consideration of its place in a threatened natural world" (1996, p. 237). As a result of the need for this function and this redirection, the interdisciplinary field called ecocriticism, which is a postmodern approach to literary criticism, has emerged, and it will be explained in the successive part.

2.2. Ecocriticism

The focus of literature has varied over the centuries, occasionally turning to issues such as class discrimination, gender inequality, racial injustice, and religious prejudice. The world's agenda has left its traces in literature as in every discipline.

Ecological problems such as earthquakes, floods, climate change, avalanches, tornadoes, water shortages, pollution, and global warming, all of which are reported in the news every day, have given literature a new task: to reflect these phenomena. While other disciplines like sociology, philosophy, and psychology deal with the environment and are related to it, literature has long been outside of this subject and has not been able to make a complete relationship. However, as mentioned in the previous chapter, nature can be observed in every field, from mythology to philosophy, including literature. Increasing air pollution, global warming, climate change, destruction of natural resources, natural disasters, human exploitation, and destruction of nature day by day have led to the need to take steps and to create awareness for Earth. However, literary works and literary criticism have never been united under one name and theory with the aim of creating awareness. In the 1990s, with increasing ecological and environmental problems which have led authors and critics to take action to raise awareness, the first clear steps began to be taken. Trying to understand nature and to find solutions for Earth, which is the only home of mankind, has spearheaded the birth of the interdisciplinary field 'ecocriticism'.

Ecocriticism is a part of postmodernism, which has generally emerged as a movement of thought and culture belonging to the second half of the twentieth century. As stated by Snipp-Walmsley, postmodernism can be defined as an urge that has always been present, albeit always suppressed in Western society, to deny and uncover to celebrate silence and otherness (2006). This movement, which emerged in opposition to modernism, emphasizes multiple perspectives, diversity and relativism, rejecting modernism's focus on unity, progress and universal values. Ecocriticism and postmodernism, which came to light around the same time, in the second half of the twentieth century, intersect at many points and are intimately interconnected. As Oppermann states, ecocriticism and postmodernism are linked by the characteristics of environmentally oriented postmodernism, including plurality, heterogeneity, connectedness, and rupture (2006, p. 116). Moreover, the theory of ecocriticism is a movement of thought which argues that a text cannot have meaning on its own and can only gain meaning through its interaction with other texts; in the same way, postmodern thought rejects the unity of meaning and adopts the concept of 'intertextuality', thus this postmodern thought is also found in ecocriticism (Bulut,

2005). In addition, it should be seen as one of the key points that both movements take a stand against grand narratives. Ecocriticism promotes alternate viewpoints and challenges widely held beliefs about nature and the environment, whereas postmodernism stresses diversity and criticizes universal truths. Both movements emphasize the critique of representation. While postmodernism emphasizes the inadequacy and mutability of representation, ecocriticism focuses on the difficulties of representing nature in a correct way. They both advocate that representation should be considered in its personal, cultural and environmental contexts. In this sense, the significance of postmodernism in the constitution of ecocriticism cannot be denied.

The term ecocriticism was first put forward in 1978 in William Rueckert's article "Literature and Ecology: An Experiment in Ecocriticism". He explains the notion of ecocriticism as "the application of ecology and ecological concepts to the study of literature" (1996, p. 107). In this basic explanation, the fact that there is a connection between ecology and literature is asserted. Through this article, Rueckert not only breathed new life into the relationship between the biosphere and literature but also proved that literary critics are indebted to the world human beings live in and brought a new insight into literature. On the other hand, the roots of ecocriticism date back to Joseph Meeker's *The Comedy of Survival Studies in Literary Ecology*. He explains the term literary ecology as "the study of biological themes and relationships which appear in literary works. It is simultaneously an attempt to discover what roles have been played by literature in the ecology of the human species" (1980, p. 29). As he claims, literature has been a tool that people have imitated and adapted to their lives for centuries. After these contributions, many authors and critics have realized this connection and created their own definitions. Glotfelty, one of the most important pioneer names of the movement, explains ecocriticism:

Ecocriticism is the study of the relationship between literature and the physical environment. Just as feminist criticism examines language and literature from a gender-conscious perspective, and Marxist criticism brings an awareness of modes of production and economic class to its reading of texts, ecocriticism takes an earth-centered approach to literary studies. (1996, p. xviii)

As she states, literary theories create connections between phenomenon and literature; feminist criticism focuses on language and literature from the standpoint of gender, Marxist criticism builds bridges between economy, social status and literature, and ecocriticism intends to break human-centred perspective and instead of place an earth-centred attitude which focuses on the connection between literature and physical environment. On the other hand, according to Garrard, the comprehensive definition of ecocriticism is “the study of the relationship of the human and the nonhuman, throughout human cultural history and entailing critical analysis of the term ‘human’ itself” (2004, p. 5). In other words, Garrard emphasizes that it is important to focus on the term “human being” and to think about what makes human beings superior. In this context, what is it that makes man superior to nature that gives him the authority to exploit it? In the culture and hierarchy structure that mankind has created, he acquired the right to abuse nature. For this reason, environmental problems are not only ecological but also cultural because of man’s insatiable desire to dominate nature. Human beings make sense of their interaction with nature and the environment through their cultural background, and this interaction is also reflected in literary works. Through its engagement with ecology, culture enables ecocriticism to approach environmental problems in a sensitive manner. Culture serves as a guide in interactions with nature and the environment. By showing the interaction of cultural values with nature and the environment, literary works raise readers’ awareness of environmental issues. Then, indeed, ecocriticism is a discipline that focuses on understanding the complex relationship between culture and ecology and approaching environmental issues from a cultural perspective.

The word ‘ecocriticism’ has its origin in the Greek language: “Eco and critic both derive from Greek, *oikos* and *kritis* and in tandem, they mean ‘house judge’” (Howarth, 1996, p. 69). These two words are essential since *eco-* is “a prefix derived from the Greek *oikos* meaning ‘house’ or ‘dwelling place’” (Allaby, 2010, p. 125), which refers to the only Earth that mankind has been living for centuries and *kritos*, it means judge, alludes to mankind who wants to keep nature in his control and who wants to dominate it (Howarth, 1996, p. 69). Therefore, there is no doubt that the relationship between human beings and nature appears in the control of mankind. Although the word originates from the Greek language, it did not take long for the

concept of ecocriticism to be included in literature. However, as can be understood from the definitions and the previous chapter, the relationship between human beings and nature can be traced back to the first moment of human existence. In addition, ecocriticism has been shaped by the accumulation of many factors, such as the romantic interest in nature during the Romanticism period, the Transcendentalism movement and the emergence of environmental problems. Since the mid-twentieth century, environmental problems have become more evident with factors such as industrialization, technological developments and growing population. Problems such as air and water pollution depleted natural resources, and deforestation emphasized the need to raise environmental awareness. In this period, ecocriticism began to adopt the idea that literature should approach environmental problems in a sensitive manner. The process of official recognition and use of the concept of ecocriticism after the 1980s is largely due to a variety of academic and cultural factors. As a reaction to environmental issues and sensitivity to environmental problems, an approach focusing on nature and the environment began to be adopted in literary criticism and analysis. Also, in this decade, ecocriticism conferences started to be organized in various universities and academic institutions. These conferences allowed ecocriticism to attract more academic attention and researchers to share their work in this field. Although the use of the term ecocriticism originates in 1978, it was not until the 1990s that this field, influenced by British romanticism and American transcendentalism, emerged academically. The first emergence of ecocriticism in academic terms is based on the emergence of The Association for the Study of Literature and Environment (ASLE) in 1992, which was founded by “a group of academics and authors founded ASLE with the aim of deepening the impact of their explorations within and outside of the classroom by examining the meanings of the natural world and the complexities of interactions with other humans and the nonhuman world” (ASLE » Vision & History, n.d.). Today, the borders of this association have expanded to many countries, such as Canada, Taiwan and India. The following year after the foundation of ASLE, the journal *ISLE: Interdisciplinary Studies in Literature and Environment*, which was founded in 1993, provided an opportunity for the publication of academic work in the field of ecocriticism and has supported the gathering of interdisciplinary research in this field. As can be understood from Garrard’s explanations, ASLE has not only

developed since the first day of its emergence but also started to analyze the relationship between human beings, nature and culture in every field:

It organises regular conferences and publishes a journal that includes literary analysis, creative writing and articles on environmental education and activism. Many early works of ecocriticism were characterised by an exclusive interest in Romantic poetry, wilderness narrative and nature writing, but in the last few years ASLE has turned towards a more general cultural ecocriticism, with studies of popular scientific writing, film, TV, art, architecture and other cultural artefacts such as theme parks, zoos and shopping malls. (2004, p. 4)

Along with these contributions, the fact that nature is so much involved in the lives of human beings, increasing environmental events, global warming, drought and many other natural events have led researchers to this field, and ecocriticism has started to be given as a lecture in many universities. In this way, the fundamental explanations and aims of ecocriticism are brought to light. The very first purpose of ecocriticism is to examine the representation of nature and nonhuman environment in literary texts. In this sense, an ecocritic focuses on questions such as:

How is nature is represented in this sonnet? What role does the physical setting play in the plot of this novel? Are these values expressed in this play consistent with ecological wisdom? How do our metaphors of the land influence the way we treat it? How can we characterize nature writing as a genre? In addition to race, class, and gender, should place become a new critical category? Do men write about nature differently than woman do? In what ways has literacy itself affected humankind's relationship to the natural world? How has the concept of wilderness changed over time? In what ways and to what effect is the environmental crisis stepping into contemporary literature and popular culture? . . . (Glotfelty, 1996, p. xix)

Ecocriticism, as an interdisciplinary field, is looking for the answers to these questions with the purpose of analyzing the place of the nonhuman environmental

world in literature and other fields such as cinema, art and music. In addition to this purpose, since the environment and natural phenomena affect human life so much, the main purpose of ecocriticism is to build a bridge between human beings and nonhuman beings and to express coexistence in harmony with nature (Oppermann, 1999). In this regard, ecocriticism also tries to build an awareness of the nonhuman environment. Considering the increasing environmental events and the domination and oppression of human beings on nature, ecocriticism, as well as ecocritics, must do their duty. For this reason, Howarth defines an ecocritic as “a person who judges the merits and faults of writings that depict the effects of culture upon nature, with a view toward celebrating nature, berating its despoilers, and reversing their harm through political action” (1996, p. 69). In this respect, ecocriticism should demonstrate to human beings the effect they have on nature and seek to overthrow the stereotype of human beings who consider themselves superior and try to exert oppression over nature as well.

Love’s claim that the point of literature is to encourage human beings to question their place in the nature in which they exist, in fact, confirms these assertions (1996). In order to fulfil this mission of literature, ecocriticism and ecocritics are necessary. The ecocritic, who considers the possible future of Earth, plays a significant role in raising this consciousness and has to take many responsibilities. Peter Barry lists the responsibilities of an ecocritic:

1. They re-read major literary works from an ecocentric perspective, with particular attention to the representation of the natural world.
2. They extend the applicability of a range of ecocentric concepts, using them of things other than the natural world -concepts such as growth and energy, balance and imbalance, symbiosis and mutuality, and sustainable or unsustainable uses of energy and resources.
3. They give special canonical emphasis to writers who foreground nature as a major part of their subject matter...
4. They extend the range of literary-critical practice by placing a new emphasis on relevant ‘factual’ writing, especially reflective

topographical material such as essays, travel writing, memoirs, and regional literature.

5. They turn away from the ‘social constructivism’ and ‘linguistic determinism’ of dominant literary theories (with their emphasis on the linguistic and social constructedness of the external world) and instead emphasise ecocentric values of meticulous observation, collective ethical responsibility, and the claims of the world beyond ourselves. (2002, p. 264)

Ecocriticism attempts to break the taboo that mankind considers itself superior to everything else and at the centre and creates an approach that places the nonhuman environment at the centre, trying to understand it and reduce the damage given to it. The exploitation of nature, animals and plants, in other words, the nonhuman environment brought by technology and capitalism, which develops day by day, has alienated people from the nature of which they are a part through time. Ecocriticism seeks to eradicate this alienation and to indicate how connected human beings are with nature. Considering all of the above, ecocriticism does not only examine how nature is dealt with in texts but also focuses on the metaphorical meanings representing nature and the approaches created by these meanings; it also discusses how the plants, animals and even the type of soil that exist in nature have shaped human beings gradually, changes in language when it is about nature, and how texts approach environmental problems (Oppermann, 2012). For this reason, not every text in which nature is mentioned should be considered within the scope of ecocriticism. In evaluating a text as ecocritical or environmental, the need for some criteria is considered necessary, and ecocritics have put forward some arguments. For instance, Buell draws attention to four points to categorize a text as an environmental text:

1. The nonhuman environment is present not merely as a framing device but as a presence that begins to suggest that human history is implicated in natural history.
2. The human interest is not understood to be the only legitimate interest.
3. Human accountability to the environment is part of the text’s ethical orientation.

4. Some sense of the environment as a process rather than as a constant or a given is at least implicit in the text. (1995, p. 7–8)

Considering the consciousness to be created towards nature and the desire to create an earth-centred perspective instead of a human-centred perspective, the significance of these aspects that should be present in an environmentalist text cannot be neglected.

The fact that natural phenomena have become much more on the agenda and that readers and critics have shifted to this field has greatly affected the evolution and future of ecocriticism. When it first emerged as an interdisciplinary field in the 1980s, ecocriticism, which focused on pastoral literature and nature writing, analyzed the relationship between humans and the environment and focused on themes such as natural history as well as the protection of natural areas, expanded its field of study and focus with the laying of its academic foundations with the establishment of ASLE and the publication of scientific studies in ISLE. Glotfelty described the phases of ecocriticism by comparing the three phases of feminism, which was suggested by Elaine Showalter (1996). On the other hand, the wave metaphor was used to refine the evaluation of ecocriticism by Buell. Buell distinguishes the evolution of ecocriticism as first and second waves in his book *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination*, written in 2005. Buell emphasizes that there is no obvious difference or apparent sequence between the first and second waves, even though he divides them into two waves and claims that there are numerous intersections and common spots even between these two waves (2005, p. 24). According to him, the meaning of ‘environment’ is highlighted as ‘natural environment’ in the first wave. In this case, it would not be misleading to indicate that the focus of the first wave was on nonhuman nature as well as wilderness. Ecocritics, in this era, discussed nonfiction works, nature writing and environmental comments on American nonfiction novels, pastoral literature and Romantic movement poems. Telling something about the nonhuman environment can be considered as the main goal of this wave. The works of Romantic poets such as William Wordsworth, William Blake, and John Keat and American authors such as Henry David Thoreau, Rachel Carson, Barry Lopez, and John Muir were taken into consideration from the perspective of ecocriticism in this wave. However, as can be understood from the

authors mentioned, the emphasis was on American and British literature, which has slowed the spread of ecocriticism to the literature of other countries. On the other hand, the second wave enlarged its borders, reached different countries and embraced different literatures. Also, when the first wave of ecocriticism was focusing on nonfiction works, multiple genres were included in the field of study of ecocriticism in the second wave. In this way, ecocriticism, which had initially a narrow perspective, not only broadcast this perspective to various countries but also embraced diverse genres. In the second wave of ecocriticism, rather than focusing on only wild nature, the scope is turned to urban areas as well. Yet, the most striking division between these two waves is that the second wave of ecocriticism takes ‘environmental justice’ into account. While people with lower living standards cause less damage to nature, they are more exposed to climate change, global warming, and natural disasters. The environmental injustice suffered by these marginalized communities is the most prominent issue of the second wave. However, Joni Adamson and Scott Slovic discussed the existence of the third wave in a special issue of MELUS: Multi-Ethnic Literature of the U.S.:

Literary expression of environmental experience is as diverse as any other body of writing, of course. Yet until recently the community of ecocritics has been relatively non-diverse and also has been constrained by a perhaps overly narrow construing of “white” and “non-white” as the primary categories of ethnicity. Therefore, this issue will explore what seems to be a new third wave of ecocriticism, which recognizes ethnic and national particularities and yet transcends ethnic and national boundaries; this third wave explores all facets of human experience from an environmental viewpoint. (2009, p. 6–7)

In this sense, the third wave of ecocriticism considers a transcultural approach and aims to explore the experience of humans in regard to ethnicity through an environmental literature perspective. Thus, the third wave also provided a bond with environmental literature through cultures. Progressively, critics have turned their faces to this field of study and put forward precious research, and the advancement of

ecocriticism has gained acceleration. Thus, the field of ecocriticism has been influenced by many different fields and has also been divided into more specific areas.

2.3. Thoughts and Philosophies Feeding Ecocriticism

Philosophies and ideas have fueled the field of ecocriticism and enabled its development. In this part, deep ecology, social ecology and ecofeminism will be explained in detail.

2.3.1. Deep Ecology

The term deep ecology, first used by the Swedish philosopher Arne Naess in 1973 in the article “Deep Ecology Movement: Some Philosophical Aspects”, emerged to criticize shallow ecology. Baard summarizes shallow ecology as anthropocentric and takes an entirely instrumental perspective on the environment, considering it to be a resource-based account and the preservation of resources for human use (2015). Since shallow ecology only concerns mankind and the future of mankind, the resources in nature must serve the existence of mankind. When shallow ecology is considered in more detail, it is inevitable to realize that the sole purpose of the existence of nature and the nonhuman environment is to glorify and benefit mankind. From the perspective of shallow ecology thinkers, “the resources of Earth belong exclusively to the human beings who have the technology to exploit them” (Das, 2019, p. 137). Shallow ecology not only prioritizes human welfare, but it also justifies the exploitation of natural resources in the pursuit of human welfare. Deep ecology seeks to encourage social and cultural transformation, particularly in industrial nations, while the shallow approach prioritizes cost-benefit analysis and technology remedies (Kortetmäki, 2016). Thus, deep ecology emerged as a thought that recognizes the value of every animate or inanimate being and every existence in nature. Naess offers eight principles to explain deep ecology:

1. The well-being and flourishing of human and nonhuman life on Earth have value in themselves (synonyms: intrinsic value, inherent

value). These values are independent of the usefulness of the nonhuman world for human purposes.

2. Richness and diversity of life-forms contribute to the relation of these values and are also values in themselves.

3. Human beings have no right to reduce this richness and diversity except to satisfy vital needs.

4. The flourishing of human life and cultures is compatible with a substantial decrease of the human population. The flourishing of nonhuman life requires such a decrease.

5. Current human interference with the nonhuman world is excessive, and the situation is rapidly worsening.

6. Policies must therefore be changed. These policies affect basic economic, technological, and ideological structures. The resulting state of affairs will be deeply different from the present state of affairs.

7. The ideological change is mainly that of appreciating life quality (dwelling in situations of inherent value) rather than adhering to an increasingly higher standard of living. There will be a profound awareness of the difference between big and great.

8. Those who subscribe to the foregoing points have an obligation directly or indirectly to try to implement the necessary changes. It is this principle that highlights the importance of deep questioning as the process by which to follow/develop/enact the other principles.

(2005, p. 38)

As a radical system of thought, deep ecology breaks the conventional moulds of philosophy and ecology. These eight principles listed by Naess are proof of how interconnected the relationship between nature and human beings is. The second of these eight principles, in particular, underlines the interconnectedness of everything in nature. Intended for this chain not to fail, human beings should avoid consuming nature for their own ambition and benefit. Human beings should not attempt to exploit the

diversity of nature in their own interest since they are, in fact, not superior to any other beings on the planet. For this reason, first, human beings must recognize that they are part of nature, and then social and political changes are crucial to eliminate such exploitation of the non-human environment. The emphasis on leaving the anthropocentric point of view and the value of every animate and inanimate being in the ecosystem and biosphere has also appeared in the literature. Accordingly, the authors accepted the eco-centered point of view and reflected it in their works. In this way, literary works in the light of deep ecology also explore the connection between nature and human beings profoundly.

2.3.2. Social Ecology

Social ecology is one of the important fields that nourish ecocriticism, and its principles were determined by Murray Bookchin, who is seen as its founding father. Bookchin has focused on the meaning of the concept of nature as well as the place of human beings and society in nature. In the very first pages of *The Philosophy of Social Ecology*, Bookchin dwells on the definition of nature, underlining that there are several distinct philosophical definitions of nature. However, he points out the harmony of mankind with nature and then states, “Unless we know what nature is and what humanity’s and society’s place in it is, we will be left with vague intuitions and visceral sentiments that neither cohere into clear views nor provide a guide for effective action” (1996, p. 3). For this reason, social ecologists attach utmost significance to the place of human beings and society in nature. Their definition of nature is also unlike other ideas. From the point of view of social ecologists, İdem identifies nature as a developing evolutionary process in a long and continuous state of diversification so that nature will not only progress from nonliving to living but will also reach the societal through cumulative development (2002). For them, nature is not something static but dynamic, which continues to evaluate itself. Social ecologists who conceive of the interconnectedness of nature and society divide nature into two aspects. The first nature is associated with the wild one that can also be regarded as the accumulation of the organic world; on the other hand, the second nature is interconnected with mankind building a new nature with the values they create. Bookchin explains the first and

second nature as “Human beings always remain rooted in their biological evolutionary history, which we may call ‘first nature,’ but they produce a characteristically human social nature of their own, which we may call ‘second nature’” (2007, p. 26–27). In this respect, the connection between mankind, society and nature cannot be dismissed by some means or other. While deep ecologists glorify pure and wild nature, social ecologists underlined the fact that the second nature is as important as the first. It is also possible to explain this importance as “it [the word of nature in second nature] underlines the continuity between human beings and natural history and environment, whereas the term second emphasizes the uniqueness of the species that consciously and linguistically mediates its relation surroundings” (Best, 1998, p. 339).

Bookchin emphasizes that environmental problems are not related to either nature or human beings in his works many times. Ecological problems are based on social problems; therefore, they require social solutions. In this sense, Murray Bookchin, whose aim is to create an understanding that compounds nature and the social world, interiorizes “hierarchy” and “domination” as key concepts. He advocates that there is a connection between ecological problems and social inequality. As maintained by Bookchin, “Ecology raises the issue that the very notion of man’s domination of nature stems from man’s domination of man” (1980, p. 15). Consequently, social ecology argues that in order to eliminate the domination of human beings over nature and ecological problems, the domination of human beings over human beings must be eliminated. Thus, the idea that the ecological world will be beneficially changed by the dissolution of hierarchy in society has also inspired ecocriticism.

2.3.3. Ecofeminism

Feminism, which can be described as the movement that aims to avoid gender inequality and advocates equal rights and opportunities for women and men, has extended its borders by combining its principles with ecology eventually. The ideology of ecofeminism emerged from a variety of feminist initiatives and research areas, including peace, labour, women’s health, and environmental and animal liberation

movements, as well as those against nuclear power (Gaard, 1993). The relationship between wars, as a part of politics, sexual and class discrimination, and the destruction of nature can be regarded as the cause of the emergence of ecofeminism (Kümbet, 2012, p. 173). In the 1970s, Françoise d'Eaubonne, who manifested the basic principles of ecofeminism, established a fateful connection between the domination of fertile land and the domination of women's fertility; she also states, "The conflict between the sexes is closely connected to the ecological. The place of women in the ancient community is determined by that community's relationship with the natural environment"¹ (1978, p. 28). In this regard, she has pointed out that not only the conflict between men and women is reflected in nature, but also that the social role and status of women depends on the relationship of the community they live in with nature. In societies that live in harmony and sustainability with nature, the role of women can often be more equitable, whereas, in societies that exploit or control nature, women's social roles are more restrictive. Ecofeminism emphasizes the relationship between nature and social structures. In this respect, societies which have patriarchal understanding, both woman and nature, have been dominated. Women's role in nature and their relationship with nature is an influential aspect in shaping gender roles. Sturgeon describes this point in the book chapter "Ecofeminist Movements" as follows:

One position involves an argument that patriarchy equates women and nature, so that a feminist analysis is required to understand fully the genesis of environmental problems. In other words, where women are degraded, nature will be degraded, and where women are thought to be eternally giving and nurturing, nature will be thought of as endlessly fertile and exploitable. (2007, p. 242)

As a result of the connection between women's fertility and the self-renewal of nature, both have been seen as phenomena to be utilized by patriarchy. In other words, women are often ascribed caring and nurturing roles, and although these roles are seen as innate by the patriarchal society, they are not appreciated. Nature is similarly expected to take on the role of providing resources for mankind. Both nature and

¹ This quotation was translated from French into English by the thesis writer.

women are seen as resource providers. Since women are identified with nature, both are expected to serve the physical needs of men (Birkeland, 1993). Patriarchal dominance not only causes simplification of women and nature, but also patriarchal society sees women and nature as something that can be exploited. When these reasons are taken into consideration, ecofeminism fights against both anthropocentric understanding and androcentric understanding.

In addition to the close connection between women and nature, dualisms, which have been created by Western society, affect the destruction of nature. As King states, "The systematic denigration of working-class people and people of colour, women, and animals are all connected to the basic dualism that lies at the root of Western civilization" (2018, p. 583). Western societies have constructed dichotomies such as man/ animal, male/ female, west/ east, mind/ body, and culture/ nature, and have always considered the ones on the left superior to the others. In this context, as can be seen in these dichotomies, men and culture are seen as superior to women and nature. Underlining that these dualities are closely linked to the destruction of nature, ecofeminism challenges these dualities and endeavours to eliminate them. In the ecofeminist view, it is impossible to prevent the exploitation of nature without eliminating the dualities and the power struggle between these dualities that the Western world has established in the degradation of nature (Kümbet, 2012, p. 182).

There is no doubt that the ecofeminist perspective, which argues that forms of domination over nature and the female body have the same ideological roots, is frequently encountered in literature as well. Literary texts written from an ecofeminist point of view, or that can be interpreted in this way, raise environmental awareness and offer a glimpse into alternative lifestyles by questioning the forms of relationship between nature and gender roles. The bond that female characters establish with nature does not remain at the level of mere representation; it also becomes a form of resistance through ethical sensitivity that they developed against the exploitation of nature. Accordingly, ecofeminism views literature as a tool for both ecological and political change in addition to being an aesthetic production. Especially in the postmodern period, narratives that deal with the relationship between nature and women's representations in multilayered ways have strengthened the response of ecofeminist thought in the literary field. Ecofeminists have particularly focused on science fiction

and dystopic writings rather than nonfiction as a means of exploring the intersections between gender and ecology. As Murphy suggests:

It also seems to be the case that environmentally concerned women have turned to SF in order to depict dystopias, utopias, and eutopias that demonstrate the connections between oppression of women and the destruction of nature, as well as the changed relationship to nature that humankind would have if there were gender equality. (2009, p. 90)

Ultimately, ecofeminism aims to eliminate patriarchy and its domination over nature and women by establishing a link between women and nature and to reduce ecological crises through women's movements. Moreover, ecofeminism seeks to comprehend environmental and gender inequalities and provides solutions to eliminate these inequalities.

3. AN ECOCRITICAL ANALYSIS OF PAOLO BACIGALUPI'S *THE WINDUP GIRL*

"Everything is change. It would be good for you to remember it. Clinging to the past, worrying about the future. . . It's all suffering."

Paolo Bacigalupi (492)

The Windup Girl is the first and Hugo and Nebula award-winning novel of Paolo Bacigalupi, who was born in Colorado but spent his formative years in China. Starting his career as a short story writer, his stories, such as "The Calorie Man" and "Yellow Card Man", paved the way for *The Windup Girl* (Rain Taxi, 2010). Bacigalupi's short story experiences and time spent in Asia played a major role in shaping his bestselling science fiction novel, *The Windup Girl*. When asked why he approaches environmental issues with a pessimistic attitude in his works, Bacigalupi, in one of his interviews, says, "Environmental science is telling us a lot about our future and what it could look like, whether we're talking about global warming or a loss of genetic diversity in our food supplies, or the effects of low-dose chemicals on human development" (Bacigalupi, 2010, Interview). He was profoundly influenced by environmental science and the current condition of the planet, and by writing a novel that is set in the future, he has encouraged readers to consider ecological issues. In the context of ecocriticism, the present chapter of this thesis will focus on how the novel combines environmental destruction and biotechnological manipulations, how these elements shape the social structure and the world, and the importance of the relationship that individuals establish with nature in their struggle for survival. In this respect, this chapter aims to analyze the environmental, social and ethical dimensions of *The Windup Girl* in order to reveal how nature, environment and human relations are interconnected.

The novel is set in a post-apocalyptic world where resources are depleted. It questions the collapse of nature and the strong effects of biotechnology on mankind in the 23rd-century world, especially in Thailand after the Contraction period, which was a catastrophe that led to the depletion of petroleum resources, the downfall of several countries and numerous deaths. The fact that the novel discusses the Contraction period and details what transpired afterwards is a key point because this period

represents a radical stand against the notion of growth and history. With the Industrial Revolution, mankind has adopted the norms of growth, development and progress as a goal for its life, yet Bacigalupi turns these norms upside down in the world he constructs, making it necessary to shrink, stop and even retreat. In the aftermath of the growth-oriented industrial age, societies struggle to survive against famine, climate instability and the monopoly of biotechnology companies over food. Thus, the period of Contraction is used to portray the consequences of an unsustainable capitalist structure and a disregard for nature. According to Hageman, in Bacigalupi's post-expansion world, disease strains that evolve as quickly as they destroy crops and the people who come into contact with them have caused a worldwide agricultural disaster (2012, p. 283). The agricultural catastrophe has set the stage for ecological problems and caused diseases that have devastated humankind. However, the new world order depicted in the novel is much more than this in terms of the changing nature of the ecosystem, and the world is on the verge of collapse. At its core, the novel is about the struggle of nations and individuals to survive in a world of global warming, rising sea levels, depletion of fossil fuels and the proliferation of genetically modified foods. Thailand, with its own seed banks and biotechnological isolationist policies, is trying to protect itself from the influence of the Western Calorie Companies, which are giant profit-driven multinational corporations monopolizing global food production and biotechnological seeds. In *The Windup Girl*, "The narrative is focalized through a host of characters from different ethnic and class backgrounds, offering a kaleidoscopic view of a society on the brink of collapse" (Idema, 2020, p. 51). This narrative technique also reveals the fact that despite the cultural and class differences of these people, they all suffer from the same ecological problems but in different ways. Therefore, the novel contains several characters; Anderson Lake is an agent for an American biotechnology company called AgriGen, which is trying to access Thailand's secret seed reserves. Emiko, the so-called 'windup' of the title, is a genetically engineered post-human woman created in Japan. She is smuggled to Thailand and exploited in the prostitution industry. Other important characters include Jaidee, who works for the Thai Ministry of Environment and advocates for biotechnological isolation; Kanya, his loyal assistant; and Hock Seng, a Chinese refugee without Thai citizenship who works in Anderson's factory. Each of these

characters represents different vulnerabilities of the system, conflicts of interest and different perspectives of ecological collapse.

Thailand, as a setting, has a significant effect on the work of Bacigalupi. After the Contraction, which can be associated with an ecological collapse, Thailand is one of the countries that survived. While agriculture and biodiversity are largely vanishing globally, Thailand is portrayed as an autonomous biotechnology centre and one of the last remaining bastions of genetic diversity. The Thai Kingdom keeps the natural seeds in its hands: “The Thais have been successfully growing potatoes for at least five seasons. They’re obviously on the top of seed bank...” (Bacigalupi, 2010, p. 9). In the universe of *The Windup Girl*, global food production is largely under the control of calorie companies, yet Thailand has been successfully growing potatoes for five seasons, demonstrating that they are still able to use their own genetic resources and practice sustainable agriculture. Thailand, among all countries, keeps its own natural seeds in the Seed Bank, which is described as one of the most strategic places to control food production in the future, where genetic diversity and natural seeds are stored. On the one hand, Calorie companies are destroying genetic diversity and imposing their own genetically modified organisms (GMOs); on the other hand, since Thailand can produce food from natural seeds, they are seen as a strong rival in the global food war. This situation proves that Thailand resists ecological crises and tries to protect nature and the boundary between natural and unnatural by keeping the seed banks out of the political war; however, calorie companies believe that it is possible to replace the natural with human creation. The production of food is not simply dependent on what nature gives them; their disdain for nature leads them to dominate it and assume the role of a god. In other words, nature is, for them, only a source of material and no more than an object. In this respect, Bacigalupi criticizes the commoditization of nature and the ecological control mechanisms of global companies.

The struggle of Thailand to maintain its genetic independence can be seen as a symbol of the struggle of nature against capitalist forces which are associated with the global calorie companies. While natural disasters happen in other cities around the world, the people of Bangkok strive to protect this city from disasters. In addition, in Thai culture, trees are thought to have spirits, rivers are seen as gods, and Buddhist and animist traditions are closely intertwined with daily life. Nature is attributed great

value, which is why Bangkok is known as the ‘City of Divine Beings’ due to the deep-rooted belief that nature is sacred. Unlike the belief in the transcendence of nature, at the beginning of the novel, the city is depicted with skyscrapers, Cheshire cats - genetically modified cats- and beggars with various genetic diseases (p. 10). This ironic depiction of the city shows that Bangkok has drifted away from sacred nature and that people have created their own cities by interfering with nature. Ecological balance has thus been disrupted. For this reason, the people of the city have also contradicted their own beliefs and culture, so the bond between nature and culture has come to a breaking point. To protect themselves from floods and ecological disasters, the people of Bangkok built levees and walls, which diverted the city from its divine nature and turned it into a city under human control. The intervention in nature has both failed to create a divine city and caused ecological problems. Nonetheless, mankind is punished for its interference in nature, and the city will be flooded. Although Thais believe they are protecting the divine city closely tied to nature, the state of the world, as well as the city after the Contraction period, is miserable and unlivable; Jaidee, who is a White Shirt, which means he works for the Environment Ministry, states:

The plagues were but the latest insult to the Kingdom’s survival. First came the rising sea levels, the need to construct the dikes and levees. And then came to oversight of power contracts and trading in pollution credits and climate infractions...Then there was the monitoring of fishery health and toxin accumulations in the Kingdom’s final bastion of calorie support. And there was the tracking of human health and viruses and bacteria... (p. 173–174)

The impact of the ecological crisis that has accumulated in the city has increased. Firstly, to protect the land from a flood, levees are built. Then, instead of solving the issue, negotiations on commercializing energy policies, carbon credits, and environmental pollution begin. Food sources, aquatic ecosystems and toxin levels are then observed. These successive situations, at every stage of ecological destruction, have become a cycle of attempting to control disasters rather than finding solutions. By trying to control disasters instead of stopping them, humanity is, in fact, only postponing the collapse. Since they regard nature as an object that could be controlled,

they do not think that living in harmony with it would make their lives easier. Nature, however, can renew itself; if sea levels rise, new coasts form; if diseases spread, people die, but viruses live on. Consequently, in the novel of Bacigalupi, humanity, rather than being in harmony with nature, seeks to control and exploit it, while deep ecology claims “Man is an integral part of nature, not over or apart from nature” (Devall, 1980, p. 310). Nevertheless, nature reacts to this oppression, and people are forced to suffer the consequences.

The desperation caused by ecological problems can be observed through the focalization of Kanya, who is a co-worker of Jaidee “Wetland, and yet the surface bakes in the heat. The dry season never ends. Will the monsoon even come this year? Will it save them or drown them?” (Bacigalupi, 2010, p. 338). Although Thailand has a rainy climate, the portrait of the wetland demonstrates that the ecology has collapsed. The endless dry season is the consequence of the disruption of seasonal cycles and changes in weather patterns, which is the cause of the actions of mankind. The world has become an unbearable place, and people have started to lose hope for the future. Kanya questions the negative and positive sides of monsoon because if it comes, the city will be flooded; on the other hand, people will die because of scarcity and heat. Thus, the unpredictable and devastating consequences of climate change blur the boundary between salvation and catastrophe.

The novel starts with the focalization of Anderson, who works for a Calorie Company named AgriGen. After the Contraction period, the depletion of energy sources and food in the world led to the emergence of calorie companies, which are a threat to agricultural diversity. These huge, multinational companies that monopolize the biotechnology and agriculture sectors and control genetically engineered seeds and food resources have taken over the entire production of food when the ecosystem collapsed. According to Donnelly, as implied by the cultural shift from ‘corporations’ to ‘monopolies’ as a unit of measurement, it has been demonstrated that the transition from petroleum to ‘calories’ as a major global trade commodity strengthens rather than weakens corporate control (2014, p. 161). This suggests that corporations are no longer just economic actors but monopolies that control the basic resources of life, and power belongs to the companies that control these resources. Though Anderson looks like a director in a factory, his fundamental mission as a calorie company agent is to seize

the genetic wealth that biotech companies cannot control and get biopolitics power. Anderson is in a local market, and the novel sends the message of the downfall of the ecosystem from the first lines:

Anderson nods and makes himself smile. ‘What are they called?’

‘Ngaw.’ She [the seller] pronounces the word carefully for his foreign ear, and across sample.

Anderson takes the fruit, frowning. ‘It’s new?’

‘Kha.’ She nods an affirmative.

The skin has the rust-red tinge of blister rust, but when he sniffs, he doesn’t get any stink of decay. It seems perfectly healthy, despite its appearance. (Bacigalupi, 2010, p. 1)

The new world order is established on gene hacking. Catastrophes occurring on a global scale caused by mankind have damaged vegetation so that agriculture is practically unfeasible. Thus, anything ‘new’ in the current ecological crisis is genetically engineered and mutated. The brief interaction between the seller and Anderson carries an essential ecological symbolism on the very first page of the novel, pointing to the fragile relationship between nature, technology and culture. The appearance of the fruit alludes to an unnatural state, a potential biological degradation, as the fruit looks diseased without showing signs of decay; so, a superficially unhealthy but functionalized version of nature is indicated. Gene hacking is not limited to ‘ngaw’, there is a variety of new food such as “cibi.11.s.8 pineapples” (p. 98) and U-TeX rice. Climate change affects mankind so harshly that the absence of vegetation and drought give rise to unnatural nutrients. In this sense, in the world of *The Windup Girl*, the place of natural food and sustainability of agriculture is replaced by artificial nutrients, which are developed in labs and modified genetically. However, later, when the fruit is in his hands, Anderson cannot place the existence of this fruit in his mind since “No scab of blister rust. No graffiti of gene hack weevil engraves its skin” (p. 2). Anderson struggles to find its origin and identify it because the appearance of the fruit is close to a natural one. Therefore, he cannot distinguish whether it is natural or not; in this way, he and his generation are alienated from nature. The lack of disease appearance of the

fruit gives a healthy sight, but this healthy sight is related to genetic modification instead of a natural state. The use of the 'graffiti' word depicts the artificial imprints carved on a genetically engineered nature; humankind exploits nature like it is a draft for the sake of human survival. In addition, Anderson is aware of the fact that the existence of the fruit is instantaneous, which demonstrates a position contrary to what is natural, for it did not exist yesterday (p. 2). Producing new nutrients in labs induces questioning the existence of it and blurring the boundary between natural and unnatural. In this regard, mankind has tried to reconstruct nature but in its own way. Moreover, there was nothing as 'ngaw' in the ecosystem surveys of last year (p. 90). It can be claimed that its sudden appearance can be associated with a natural process that is no longer predictable and stable. Human beings attempt to create an ecosystem which is controlled by themselves, yet they cannot achieve containment and natural evolution becomes replaced by an unrestrained and synthetic process.

The genetically modified and unnatural production of food in laboratories also creates sociocultural problems. The power of genetically modified food production is held by large companies such as AgriGen, PurlCal, etc.; thus, due to the inability to cultivate food in fields, people are dependent on these companies for their most basic need, nutrition. In the novel, it is mentioned that "Food should come from the place of its origin and stay there. It shouldn't spend its time crisscrossing the globe for the sake of profit" (p. 133–134); this quotation emphasizes social criticism as well as ecocriticism. While emphasizing that food should be consumed by local people without being separated from the geography where it is cultivated, this expression reveals that the food system, working in reverse, has turned into a structure that exploits both human communities and nature. In a world where food can only be genetically engineered and produced by big calorie companies, people lose their direct connection to nature and become dependent on the control of these companies for their survival. This circumstance is related to the social ecology philosophy of Bookchin, who suggests that "the very notion of the domination of nature by man stems from the very real domination of human by human" (1982, p.1). Thus, there is a connection between ecological problems and social domination; the exploitation of nature cannot be considered inseparable from the domination of mankind over each other. As stated in the novel, monopolization over food production and distribution shapes not only

ecosystems but also the patterns of life in communities. In this context, the bond between natural destruction and societal inequalities cannot be denied. Biotechnological power wielded by calorie companies, such as AgriGen and PurCal, turns into a tool for managing both people and nature. By demonstrating the consequences of genetic engineering, Bacigalupi highlights the effects and the ways in which the global capitalist system reproduces social injustices.

Power struggles are not just confined to big companies which produce and distribute nutrients; also, there is a serious power struggle between the structures that control production. In the world of *The Windup Girl*, big calorie companies are linked to the Trade Ministry, which desires to control the economy; on the other hand, the Environment Ministry wants to conquer ecological power. The conflict between the Trade Ministry and the Environment Ministry specifically reveals the administrative aspect of this struggle. The Trade Ministry, which supports the free market, and the Environment Ministry, which aims to maintain an isolationist stance of the Thai Kingdom, are the two agencies whose hostility sets off the main plot events (Kabak, 2019, p. 82). However, this power fight is about more than just politics; it is for survival. Since natural fruits and vegetables are not stable anymore, they mutate frequently and lead to dangerous outbreaks such as blister rust and cibiscosis that they affect not only ecological cycle but also the continuity of human life. For instance, every three seasons, blister rust undergoes a mutation (Bacigalupi, 2010, p. 8). The fact that crops mutate several times per season reveals the incompatibility of these foods with nature. Moreover, rather than a sustainable life, it is a fragile and crisis-oriented order that creates permanent instability in both the natural and social order. The scramble for possession of genetic material is compounded by diseases and climatic disasters, leading to chaos. Jaidee says, “We aren’t safe in any case. If it’s not Trade, it’s blister rust or cibiscosis or something else, something worse. We aren’t living in a perfect world anymore. This isn’t expansion” (p. 82); he is aware of the fact that they live in the worst time in the world. Gene coding, which is the result of the domination of mankind over nature, causes threats such as blister rust and cibiscosis. In addition to the unpredictable consequences of interventions in nature by mankind, in a world where the ecological balance is extremely compromised, each new day can trigger a bigger crisis. Alongside the burden of diseases, the domination that the Trade

Ministry aims to impose encourages ecological problems. At the same time, Jaidee indicates that the challenge to nature or political power is inseparable and that the Expansion era, whose focus is on growth, comes to an end; the new world is an era of constant danger and domination. In this context, the attempt of mankind to dominate nature has collapsed, and the consequences have shaken the entire social structure as well as the environment. It can also be reconciled with Bookchin's theory of social ecology since the problems are both environmental and combined with problems of social injustice, political power struggles and technological monopolization. It makes it clear that human beings are not disconnected from nature but can collapse together with it.

The question of how and by whom natural resources, and seeds in particular, are regulated becomes crucial as a result of the competition for dominance between the Environment Ministry and the Trade Ministry, which is not just based on political conflicts of interest but also reflects the desire to own and control nature. In the face of artificial ecosystems managed by calorie companies, seedbanks imply that nature still has the potential for a kind of resistance. However, in the novel, seedbanks are not open structures that offer the possibility of returning to nature; on the contrary, they are locked boxes that have turned into a field of rivalry between political and economic powers, and Anderson, as a worker of a calorie company, sometimes thinks about where the seed bank is hidden and dreams of reaching them:

Somewhere in this country a seedbank is hidden. Thousands, perhaps hundreds of thousands, of carefully preserved seeds, a treasure trove of biological diversity. Infinite chains of DNA, each with their own potential uses. And from this gold mine, the Thais are extracting answers to their knottiest challenges of survival. With access to the Thai seedbank, Des Moines could mine genetic code for generations, beat back plague mutations. Stay alive a little longer.
(p. 125)

Anderson argues that the genetic wealth that nature provides spontaneously is seen as a kind of 'treasure'; however, this treasure is perceived not as a value that needs to be protected but as a resource ready to be extracted and utilized. In this context,

nature is degraded to a mine, which is associated with the Anthropocene, a term coined by Crutzen and Stoermer to “emphasize the central role of mankind in geology and ecology” (2000, p. 17). In other words, nature has been transformed from a subject into an object; furthermore, the exploitation of it by human beings is justified by regarding nature as an object in the service of mankind. Moreover, to avoid diseases and reduce the effects of ecological destruction, mankind looks for solutions in nature; yet, the solution that they think will be helpful is not related to complying with nature but redesigning it. Therefore, seedbanks function as an extension of anthropocentric survival strategies rather than the protection of nature and sustain ecological balance. Such instrumentalization of genetic diversity reflects a mindset that seeks the solution to ecological destruction not in nature but in domination over it.

The acquisition of seedbanks is valuable in a number of respects; whoever owns them wields political and ecological power. In order to gain access to the seed bank, Anderson makes an agreement with Trade Minister Akkarat, who wields considerable power:

‘What is it you want?’

Anderson looks him in the eye, serious. ‘Access to your seedbank.’

Akkarat jerks back. ‘Impossible.’ The car turns and begins to accelerate down Thanon Rama XII. Bangkok streams by in a blur of images as Akkarat’s retinue clears the avenue ahead of them.

‘Not to own.’ Anderson puts out a calming hand. ‘Only to sample from.’ (Bacigalupi, 2010, p. 217)

With this desire to deal, Anderson seeks to acquire the genetic knowledge of nature, in other words, the codes of biodiversity. Although he uses an innocent-sounding discourse as only sampling it, his expression is an extension of the industrial perspective that instrumentalizes nature. Anderson’s desire to sample seeds refers to the exploitation of the capitalist system on nature since nature is depicted not as a habitat or a subject but as a solution-oriented resource and a data bank to be consulted in case of need of mankind. Asking for access to the seed bank is not only a search for a solution to the food crisis but also part of the struggle to control knowledge and

nature. In this way, nature becomes a phenomenon that can be consumed by mankind. However, Akkarat attributes a crucial function to the seed bank:

‘The seedbank has kept us independent of your kind. When blister rust and gene hack weevil swept the globe, it was only the seedbank that allowed us to stave off the worst of the plagues, and even so, our people died in droves. When India and Burma and Vietnam all fell to you, we stood strong. And now you come asking for our finest weapon.’ Akkarat laughs. ‘I may want to see General Pracha with his hair and eyebrows shaved off, living in a forest monastery and despised by all, but on this, at least, he and I agree. No *farang* should ever touch the heart of us. You may take an arm or a leg from our country, but not the head, and certainly not the heart.’

‘We need new genetic material,’ Anderson says. ‘We’ve exhausted many of our options and the plagues keep mutating. We don’t have a problem sharing our research results. Profits, even.’ (p. 217)

The seed bank has become much more than an ecological and natural entity. In this context, it is indicated that possession of biological material over nature becomes just as strategic as traditional economic or military power. Akkarat describes the seed bank as a way to independence; thus, nature and biodiversity have become both an environmental and a geopolitical agent. Ecosystem degradation poses a serious hazard to both the existence of mankind and the natural world. In the new world order depicted in the novel, Thailand has not been able to get the desired outcome from genetic engineering. The survival of Thailand, thanks to the seed bank, illustrates the failure of the attempt of human beings to create alternative systems by cutting their connection with nature. Humankind pays the price for its confrontation with nature; the Anthropocene understanding has resulted in the struggle of humankind with genetic diseases. Furthermore, Akkarat identifies the seed bank as a weapon, thus demonstrating that genetic material carries a political significance as well as an ecological one. In this context, according to Akkarat, the seed bank is regarded as the heart of Thailand, which cannot be conquered by a *farang*, a foreigner. In addition to providing genetic material, the seed bank also represents cultural identity and national

integrity. When this symbol, which represents the heart of the country, is exploited by outside forces, like Anderson, who is a white foreigner who works for an American calorie company, there will be nothing left of the country. Nature is defended not only as an environmental issue but as a cultural essence. Therefore, Bacigalupi emphasizes the importance of nature for the culture of a country through the decisive stance of Akkarat. On the other hand, the approach of Anderson to nature is purely functionalist and pragmatist. He considers the seed bank as a commercialized resource, not as a salvation. It is implied that nature is seen as an object of exploitation and that genetic diversity is consumed like a capitalist resource. Consequently, nature is no longer protected, controlled and instrumentalized for its own sake but for the continuation and benefit of human beings.

Similar to seeds, living organisms are products of laboratories in the novel, and the spontaneous functioning of nature has been replaced by synthetic and controlled life forms. Therefore, the goal of genetic engineering is neither efficiency nor survival but energy production and control. Megadonts are one of the most concrete instances of human intervention in nature. Recreated in laboratories with genetic material taken from extinct animals, these “elephant-derived animals” (p.12) are merely means of energy production. “The gene-hacked animals comprise the living heart of the factory’s drive system, providing energy for conveyor lines and venting fans and manufacturing machinery” (p.12). Animals are no longer in their natural form; they are genetically re-engineered. Thus, nature as it exists is deemed insufficient and is shaped according to anthropocentric needs. In other words, genetic intervention is the result of the need and desire of mankind to manage nature as well as see it as a resource. In a world where fossil fuels are depleted, and biofuels are controlled by big companies, megadonts are necessary to provide storage for new energy sources, which are known as kink springs. In this way, these creatures have been turned into the engine, the most fundamental part of the system that a living being is reduced to a production machine. The objectification of nature and that even life can be commodified to sustain the system. Thus, Bacigalupi conveys the primary conflict between life and the mechanical system. Animals are still alive; however, that vitality is not their own anymore; they exist for the continuity of human life. It is implied that nature has been stripped of all its ethical and subjective values and reconstructed as a

functional and controllable tool. In addition, Anderson is in his office at the factory when he hears a megadont screaming like it is being mistreated (p. 17); this scream symbolizes that nature is not silent but resists the violence of mankind. Furthermore, megadonts' "four tusks have been sawn off for safety" (p. 25); thus, human beings tend to shape and mutilate nature only for their own safety. It can be claimed that it is the symbolic silencing of nature for the sake of functionality. In the first part of the novel, one of the megadonts spins out of control and is killed; when it dies, its eyes are on the same level as those of Anderson: "They stare into his own, nearly human, blinking confusion" (p. 29). The eyes of the megadont aligning with the eyes of Anderson represents both a physical and metaphorical equalization. In nature, mankind and animals are equal; a situation in which mankind is superior cannot be conceived. The fact that it stares almost like a human suggests a consciousness or a search for meaning in the glance of the animal. It indicates that megadonts are not just a source of energy but a being capable of suffering and even reasoning. In this way, Bacigalupi blurs the distinction between animals and mankind.

In the novel, Cheshire cats are one of the creations of genetic engineering whose existence is a reference to Lewis Carroll's *Alice's Adventures in Wonderland*. The Cheshire Cat in *Alice's Adventures in Wonderland* sheds light on the complex relationship between animality and humanity, especially in terms of posthumanism. Indeed, Li explains, "In the light of the intricate entanglement of animality and humanity within anthropomorphism, the Cheshire Cat remains central to discussions of Alice's animalized psyche and her negotiation of humanness" (2025, p. 1). Emphasizing the ambiguity of the boundaries between human and nonhuman beings, this approach opposes the anthropocentric understanding of nature. In *The Windup Girl*, the genetically engineered Cheshire cats, which are seemingly successful products but with unpredictable consequences in the long run, show that nature is no longer natural but has become a field of power shaped by human beings. These cats have been created as a birthday gift for the daughter of a company executive (Bacigalupi, 2010, p. 38). Therefore, it is criticized that genetic engineering is trivialized and that nature is manipulated in unethical ways through the wants of mankind; in this way, the capitalist system commodifies nature. These creations, which seem harmless at first, eventually become an element that interferes with the

functioning of nature and threatens the ecological balance since the breeding of Cheshire cats becomes uncontrollable. “*Felis domesticus* was gone from the face of the world, replaced by a genetic string that bred true ninety-eight per cent of the tie” (p. 38). The natural domestic cats are replaced by unnatural ones, which are the product of genetic engineering. In addition to the commodification of nature, there are also human interventions in the ecological chain. Thus, human beings attempt to arbitrarily establish hegemony over nature in order to prove their power. However, mankind is overwhelmed by the biotechnological products that he has created, assuming the role of God.

The Ivory beetle, the last example of genetic engineering in animal production in the novel, demonstrates how the ecological chain has collapsed. Hagg, a friend of Anderson, goes to Burma to observe the spread of ivory beetle and the changes in ivory beetle, and he states, “The devastation is extraordinary. Whole forests with not a leaf on them. Kudzu, and nothing else. The entire overstory is gone, timber fallen everywhere” (p. 131). The behaviour of living beings resulting from genetic intervention is not predictable and controllable. The observations cited by Hagg suggest that this genetically modified species is not only out of human control but is also irreversibly destroying the forest ecosystem. Nature is redesigned by technology and mankind through their pleasures instead of evolution. In addition, in the period of postcolonialism and postcolonial writing, “ivory became scarce and hence more profitable” (Huggan and Tiffin, 2015, p. 165). The name of ivory of the insect implies that it is a creature that has economic value and has been turned into an object of consumption along with its aesthetic aspect. Therefore, mankind has created this creature for its own benefit within the capitalist system; however, the invasion of the ivory beetle’s uncontrolled spread and destruction of the ecological balance is proof that the power that human beings use over nature returns to human beings in the form of damage. According to the Anthropocene point, the commodification of nature and not regarding it as a subject means that human beings can exploit it. Therefore, human beings are supposed to harmonize with nature instead of using it for their own pleasures and desires.

Emiko is the most notable example of genetic transformation in *The Windup Girl*, as genetic interference extends beyond agricultural productivity to affecting the

human body. Just as nature is transformed through the principles of efficiency, obedience and control, Emiko's body is designed with a similar logic; thus, biotechnological intervention becomes evident as a form of domination in both the environmental and bodily realms. In this context, Emiko's representation deepens the novel's ecological critique of the artificiality and exploitation of the human body. Although she is defined as "more than human" (Bacigalupi, 2010, p. 50) by Gendo-sama, who is her first owner, she is described in detail:

She was built well. Trained well. Knew the ways of pillow companion, secretary, translator and observer, services for her master that she performed so admirably that he honored her like a dove and released her into the bright blue arc of the sky. She had been so honored. (p. 146)

Emiko is a project rather than an individual; she was genetically modified in a laboratory to serve humankind. Gündüz argues that the concept of order in *Brave New World* is not to create superior human beings but to establish a hierarchical order (2022, p. 53); this can be observed in *The Windup Girl* as well, the purpose of creating genetically modified 'New People' is to establish a slave-master order, that is, a hierarchical order. The fact that her body is constructed suggests that she is perceived as an object or a machine rather than a human being. She is trained like a dog or a device, not as an individual. Haraway suggests:

No longer structured by the polarity of public and private, the cyborg defines a technological poll based partly on a revolution of social relations in the oikos, the household. Nature and culture are reworked; the one can no longer be the resource for appropriation or incorporation by the other. (2016, p. 9)

Emiko is the product of an anthropocentric system; she is neither entirely natural nor merely a cultural production. Emiko is not only a serving or observing figure; she has also become an industrial reproduction of the natural, as a body alienated from nature through genetic engineering. As Haraway states, nature is not a resource to be exploited by culture; when Emiko is taken into consideration, the nature/culture distinction has become completely intertwined. Emiko stands in the middle of

nature/culture, creature/machine, and human/object dichotomies. Moreover, no matter how well-designed Emiko is, she heats up quickly because of her small pore structure. One day, when she overheats, she encounters Anderson, and he orders the driver to drive her into the ocean (Bacigalupi, 2010, p. 160). Thus, even the human product, the genetically modified windup girl, is dependent on nature for its survival.

Additionally, Emiko's return to Japan with her owner is more expensive than buying a New Person like her, so her owner leaves her in Bangkok (Bacigalupi, 2010). After staying in Bangkok, she appears in the first chapters of the novel as a character who works in a club and is raped. Her body becomes an object that can be utilized and trivialized. Therefore, her existence is a symbol of how nature becomes a meta under the control of the capitalist system. The fact that Emiko is described as trained and submissive both as nature and as a woman shows that she is dominated twice. Ecofeminism claims:

Reason in the Western tradition has been constructed as the privileged domain of the master, who has conceived nature as a wife or subordinate other encompassing and representing the sphere of materiality, subsistence and the feminine which the master has split off and constructed as beneath him. (Plumwood, 2002, p. 3)

Emiko is both biologically and socially domesticated; she was created through Japanese engineering, programmed to obey, and presented to male masters in the roles of pillow companion and maid. She is created to serve the needs of her master; that is, she exists through both the exploitation of nature and the subordination of women. In this context, Emiko is the technological embodiment of the hierarchical distinction between nature and culture, body and mind, woman and man.

The 'New Person' body of Emiko has evolved against diseases of the century; "New People fear little in the way of bacterial or parasitic infection" (Bacigalupi, 2010, p. 150). Her elimination from diseases and the description of her body as an "inhospitable host" (p. 150) indicates that her biological ties to the ecosystem have been interrupted. At the same time, the inability of microorganisms to enter the body may seem like an advantage at first, but it also means that Emiko is unable to engage with the natural environment. In this respect, Emiko's sterile structure represents her

exclusion from ecological systems and the promotion of allegedly safe bodies built with technology in a world where nature is coded as a threat. This shows how the human desire to control nature has infiltrated the politics of the body and how nature is now seen only as an element to be suppressed.

At the end of the novel, when the city is flooded, Emiko meets Dr. Gibbons and expresses that she depends on humans to breed “We cannot breed. We depend on you for that” (p. 505). Therefore, it seems that genetically modified humans are controlled by the system. However, Dr. Gibbons tells her that it is possible to make her children fertile “They can be made fertile, a part of the natural world” (p.505). Emiko is no longer just a being designed to serve but someone who wants to be a part of nature and life. This desire shows that she is trying to get out of her alienation from nature and human beings and to gain a place for herself as well as for the future. In this way, Emiko transcends the boundaries drawn for her throughout the novel and becomes not only an artificial body but also a glimpse of hope.

Environmental collapse has increasingly become a central factor shaping both the physical world and the inner world of individuals in twenty-first-century speculative fiction. In the dystopic world of *The Windup Girl*, environmental changes have affected the characters psychologically as much as the ecosystem. The relations of characters with nature and their psychological reactions to the changes in nature are the basis of an ecocritical narrative as well as individual inner evolution. In this context, the novel makes visible the fragility of the relationship between nature and humans and reveals that environmental destruction creates not only a physical but also an existential crisis. At the beginning of the novel, when Anderson tastes gnaw, the fruit, he references the Garden of Eden: “If he were a Grahamite, he would fall to his knees and give ecstatic thanks for the flavour of Eden’s return” (p. 3). In the novel, the term ‘Grahamite’ refers to a fictional belief system whose adherents view genetically modified crops and industrial agriculture as sinful practices and which desires a return to nature’s essential state, in other words, to the image of ‘Eden’. Although Anderson is not included in this belief, his fascination with this genetically modified fruit becomes something religious. By using the word of Eden, he identifies nature with a lost purity. When he tastes this fruit, he is confronted with a longing for the purity, richness and diversity which nature once possessed. However, this longing also

embodies a contradiction of the system in which he lives; Anderson, as a representative of the global biotechnology company, survives by exploiting this diversity. Thus, his reaction to the fruit reveals the transformation of nature from a pure source of vitality into a commodified object of desire and the profound detachment in the human and environmental relationship. On the other hand, Selisker suggests:

With frequent reference to Eden and the Biblical flood, the Grahamites' desire to reclaim the natural becomes tantamount to a desire for time travel or global annihilation, since these are the only solutions for returning the world to a state of natural purity. (2015, p. 504)

Thus, beyond regarding nature as a resource, it can also be observed that there is a desire to return to the purity of nature. Yet, just as Eve and Adam were thrown out of Eden for defying nature, genetic engineering can result in a sin against nature; in this sense, their desire to return to the purity of Eden has become almost impossible. In addition, Anderson's longing for pure nature is clearly stated; when he eats ngaw, he wants to see the fruit in its natural environment whether it is dangling from a tree or hiding behind bushes (Bacigalupi, 2010, p. 3). In this context, the interferences of mankind on nature have reinforced the longing for pure nature, and the outcomes of these interferences led human beings to consider nature both as a tool and to desire to experience it in its essential form. The condition of Anderson can also be associated with solastalgia, a term which is explained by Albrecht:

Solastalgia has its origins in the concepts of 'solace' and 'desolation'. Solace is derived from solari and solacium, with meanings connected to the alleviation of distress or to the provision of comfort or consolation in the face of distressing events. Desolation has its origins in solus and desolare with meanings connected to abandonment and loneliness. As indicated above, algia means pain, suffering or sickness. In addition, the concept has been constructed such that it has a ghost reference or structural similarity to nostalgia so that a place reference is imbedded. Hence, literally, solastalgia is the pain or sickness caused by the loss or lack of solace

and the sense of isolation connected to the present state of one's home and territory. (2005, p.45)

In other words, the human being is still there, yet the 'place' has changed; it is no longer recognizable. Thus, the arrival of Anderson in Thailand and the sense of alienation he experiences there can be directly related to solastalgia, explained by Yazgünoğlu as the state of feeling for lost nature (2022, p. 67). Lost in the realm of *The Windup Girl*, Anderson yearns for his ecological home, the old world. The individual feels displaced by the destruction of nature and mourns the loss of nature. The longing he feels with a sense of taste, craving for the old world, admiration for pure nature, and all the nostalgic emotions he feels are associated with the concept of solastalgia.

In addition to solastalgia and the search and longing for Eden, in the novel, the Bo tree has particular relevance by not only representing the spiritual and natural integrity of the past but also functioning as a refuge in the emotional and mental world of the characters. In the midst of destruction, chaos and technological advances, the Bo tree becomes a symbol of connection with nature, the search for meaning and inner peace. In this way, the tree becomes both a physical presence and an ecopsychology centre that reflects the emotional needs of the characters. As stated in the previous chapter, in Buddhism, nature has a unique and worshipful place, which is often demonstrated by Bacigalupi through the Bo tree "A bo tree. Sacred. The tree under which the Buddha attained enlightenment. And yet they could do nothing to save it. Not a single varietal of fig survived, despite their best efforts" (Bacigalupi, 2010, p. 114). The collapse of the Bo tree symbolizes a moral and cultural breakdown as well as an ecological one, as the tree is considered sacred. The psychological impact of this situation on the characters is revealed as deep-rooted beliefs and hopes in nature are replaced by desperation and a sense of loss. Their inability to save this tree in spite of their utmost endeavours reflects a bitter resignation to the inability of human beings to protect nature despite their scientific and technological capabilities. The nonexistence of the Bo tree refers to the loss of a species in an ecological way, but in terms of that, enlightenment, inner peace, and spiritual stability have become unattainable. This loss threatens the spiritual integrity of the characters and exposes them to the profound psychological effects of ecological catastrophe. In this sense, the devastation of nature

entails the collapse of the world of meaning in addition to the emptiness of physical space.

The characters also experience a profound sense of vulnerability and despair in the face of the change of environment. Especially in a world where ecological destruction has become a part of everyday life, individuals are neither physically nor psychologically able to entirely adapt to this process. Therefore, the emotional states of the characters are directly related to the degraded nature of the environment they live in; their individual suffering is actually an internalization of a larger ecological tragedy. Internalized ecological tragedies are reflected in the novel along with hopelessness; Kanya states, “We couldn’t save everything,” and Jaidee, in desperation, continues “, We couldn’t save even one thing” (p.115). While the sentence of Kanya shows acceptance of ecological destruction and the new world order, the expression of Jaidee is a more pessimistic perspective and indicates his despair. Jaidee, who feels helpless in the face of ecological destruction, realizes that it is too late for anything; the unpredictability of ecological destruction created by mankind is reflected in both characters. Ecological collapse is, therefore, not only about an environmental crisis, but it is an ontological crisis of mankind; Jaidee no longer knows what he can trust, what he can defend and what he can protect.

The psychological devastation of ecological collapse on individuals is deepened by the elimination of cultural and historical memory. Jaidee worries about his children’s grandchildren years from now since he thinks that perhaps they will not know about the existence of diverse plants; due to degraded ecology, the plants will become nonexistent phenomena, and they will be nothing more than the products of imagination in the future. The irreversible loss of the relationship of mankind with nature, its knowledge of diversity and its collective memory puts Jaidee in an even more desperate situation. According to Haraway:

In fact, staying with the trouble requires learning to be truly present, not as a vanishing pivot between awful or edenic pasts and apocalyptic or salvific futures, but as mortal critters entwined in myriad unfinished configurations of places, times, matters, meanings. (2016, p. 1)

Stated differently, human beings should learn to be truly present and to stay in the present moment, not dwell on the past or think too much about the future. It is emphasized that human beings need to understand the present world and live in harmony with present nature. In this context, the concern of Jaidee for the next generation is related to both his dashed hopes for the future and his fixation on the past because his struggle must be to preserve an ecological value and to create a meaningful present as well. However, the system and technological sovereignty in which he finds himself forces him to constantly focus on the future, making it almost impossible for him to take root in the present, as Haraway suggests.

The world of *The Windup Girl* becomes a miserable place for human beings. On the other hand, throughout history, nature has always retained its ability to regenerate itself in spite of all kinds of destruction, disasters and loss of species. For this reason, nature, which in the novel is on the verge of extinction, tries to find a way even in the wake of destruction. The emergence of genetic diseases, the exploitation of animals in order to get power or the extinction of some plants represent only the transition of nature from one form to another. When Anderson thinks about ‘ngaw’, he regards it as “another example of nature’s fecundity” (Bacigalupi, 2010, p. 93). Nature continues to exist and reproduce, even in different forms and new forms, notwithstanding human interventions. Even if there are man-made productions, nature adapts to the conditions that occur. The process of the self-renewal of nature is explained more clearly by Gibbons, who is a scientist in the field of gene hacking in the novel:

Blister rust is our environment. Cibiscosis. Genehack weevil. Cheshires. They have adapted. Quibble as you like about whether they evolved naturally or not. Our environment has changed. If we wish to remain at the top of our food chain, we will evolve. Or we will refuse, and go the way of the dinosaurs and *Felis domesticus*. Evolve or die. It has always been nature’s guiding principle, and yet you white shirts seek to stand in the way of inevitable change. (p. 345)

Gibbons highlights the fact that nature is always in process; it is always changing and constantly adapting to this change, which is why Timothy Morton describes nature

as “a ghost at the never-arriving end of an infinite series” (2007, p. 18). Nature is endless. In the context of Gibbons, nature is no longer the pure or pristine space it once was; the new nature has been shaped and sustained by manmade genetic disasters and changes. In addition to the fact that nature renews itself, it is obvious that it is indeed not possible to divide nature into natural and artificial anymore; the boundary between natural and artificial is blurred; however, whether natural or artificial, animate forms adapt to new conditions, even to manmade disasters. ‘Evolve or die’ is the way nature works, more than a threat to the human species. In the novel, nature does not completely disappear even if it is destroyed; on the contrary, it creates itself in other ways, sustaining itself and generating new balance and new forms of life. In this respect, the idea of the self-renewal of nature appears as a glimpse of hope for the continuity of Earth after a disaster.

A human-centred perspective is the key point of the novel, regardless of the efforts of nature. The resilience of nature or self-renewal of it seems to offer a glimpse of hope, yet this effort is often suppressed by human domination. At the centre of the ecological crises in *The Windup Girl* is an anthropocentric understanding of nature as a source or a system that can be controlled through engineering. Instead of being a part of nature, mankind is positioned as a regulator over it or even as nature itself:

The ecosystem unravelled when man first went a-seafaring. When we first lit fires on the broad savannas of Africa. We have only accelerated the phenomenon. The food web you talk about is nostalgia, nothing more. Nature... We are nature. Our every tinkering is nature, our every biological striving. We are what we are, and the world is ours. We are its gods. (p. 344–345)

The expression of Gibbons clearly reveals the Anthropocene system of thought at the centre of *The Windup Girl*. It presents an argument that human beings are not separate from nature but are nature itself. However, this argument is a legitimization of the attempt of mankind to establish absolute dominance over nature rather than a desire to integrate into nature. This reductionist definition of nature aims to eliminate responsibility by naturalizing the destructive effects of human beings on nature. In this context, the text critically exhibits the human-centred understanding of nature, which

is the defining feature of the Anthropocene era. In this age, mankind is positioned both as a species separate from nature and as a geological force that reshapes nature. The words of Gibbons become meaningful in this regard; mankind is presented as an agent that consumes, transforms and reconstructs nature in his own interests. Therefore, from an ecocritical perspective, the approach is an anthropocentric illusion that denies the subject status of nature and seeks to reduce it to the level of a passive voice. The emphasis on nostalgia by Gibbons implies that the inherent balance of nature has been disturbed and that any search for this balance is nothing but a nostalgic illusion. The ethical obligation of humans is also rendered invisible, along with the change in nature. At this stage, ecocriticism not only challenges the ways in which human beings have manipulated nature but also reveals the hierarchies of power that underlie the discourses that portray this manipulation as natural since any view that instrumentalizes nature sees it as a resource to be consumed and denies the possibility of a reciprocal relationship with nature.



4. AN ECOCRITICAL ANALYSIS OF KAZUO ISHIGURO'S *KLARA AND THE SUN*

"The Sun always has ways to reach us."

Kazuo Ishiguro (5)

Klara and the Sun (2021) is the most recent and eighth novel of Kazuo Ishiguro, the British author with Japanese ancestry. *Klara and the Sun* is set in a near future world where technology has advanced, and children are genetically modified. As in his previous novels, Ishiguro interrogates humankind and the emotional, social and ethical responsibilities of the individual in this novel, as well as the relationship between humankind and nature and the impact of technology on nature constitutes the main axis of the novel. In addition to the unnatural alteration of the human body, which is the consequence of genetic modification, the novel draws attention to air pollution as well as the depiction of nature and the sun by a nonhuman entity. The significance, transformation, and role of nature cannot be overlooked when contemplating the imminent future. Accordingly, *Klara and the Sun* offers an insightful reading from the perspective of ecocriticism, as a text that not only alters the relationship between artificial intelligence and human beings, but also underscores the significance of nature, environmental consciousness and ethical responsibilities. Considering all of this, an ecocritical reading of the novel is possible, and this chapter aims to explore that.

Klara and the Sun is a multi-layered narrative based on deep and prominent themes such as the relationship between artificial intelligence and human beings, nature, ethical responsibilities and the environmental impact of technology. It is the story of how Klara, an artificial intelligence, navigates her existence within human society and seeks to integrate into the complexities of the human world. In *Klara and the Sun*, Ishiguro depicts a society where children are educated at home and encounter challenges during the lifting process and artificial friends who are designed to offer companionship and support. The lifting process can be described as "a Panglossian term for genetic editing, done to boost intelligence, or at least academic performance" (Askew, 2021, p. 182). In this sense, despite the fact that their precise depictions are not explicitly provided in the novel, these artificial companions are intended to serve

as the best friends of the lifted children until they go for university education, guiding and assisting them throughout their formative years. The narration focuses on Klara and her human friend Josie, who suffers from the process of lifting. Ishiguro, in one of his interviews, explains his novel as “Klara is a little robot AI girl created to prevent teenagers from becoming lonely. This is a story of how she tries to save the family of humans she lives with from heartbreak and how she tries to enlist the help of the sun up in the sky to do this” (Philpott, 2021, para. 15). Klara’s view of the world plays a pivotal role in understanding the human relationship with the environment, the intervention of technology in nature and ethical responsibilities. Throughout the story, Klara observes human actions and feelings; in this way, she shapes her own actions and what she should feel. She believes that by observing more, she will be able to perceive human feelings (Ishiguro, 2021). In the narrative of Klara’s memories, which begin in a store and culminate in a landfill presumed to contain technological waste, it is not impossible to remain indifferent to the issue of air pollution and the relationship between nature and nonhuman entities. Ishiguro’s characterization presents the reader not only a different understanding of technology and its consequences but also a divergent perspective of the relationship between human beings and nature.

The narrative commences in the store where Klara and other artificial friends are sold. In the beginning, Klara states, “When I was lucky enough to see him [the Sun] like that, I’d lean my face forward to take in as much of his nourishment as I could, and if Rosa was with me, I’d tell her to do the same” (Ishiguro, 2021, p. 3). In addition to the frequent references to the Sun, which serves as a source of sustenance for artificial friends, the narrative employs the pronoun ‘he’ to refer to the sun throughout the novel. The attribution of human-like qualities to an inanimate element of nature reflects the significance that the narrator ascribes to it. Manes indicates that “Nature is silent in our culture (and in literate societies generally) in the sense that the status being a speaking subject is jealously guarded exclusively as a human prerogative” (1996, p. 15). In this regard, in societies where humankind sees itself as the most superior being, there is a tendency to see nature as an object rather than a subject with its own voice. One of the fundamental reasons for this situation is to have an anthropocentric understanding, which refers to the pivotal role of mankind in both

geology and ecology (Boes and Marshall, 2014, p. 60). By putting himself in the centre of Earth, mankind does not care about the existence of nonhuman entities in nature. However, in *Klara and The Sun*, the Sun, which can be regarded as the representative of nature, is attributed a subjectivity through the ascription of human agency, striving to give it a voice and elevating it to the status of a subject rather than an object. Thus, it highlights that humans are not the only beings on Earth. Klara invests the Sun with human values, illustrating a profound connection between her perception and the intrinsic worth assigned to this natural phenomenon. Through this approach, Ishiguro encourages the reader to question and reconsider the relationship between human beings and nature from the very outset. Yet, in many cultures, nature is associated with woman and culture is connected to man; Klara refers to the Sun as 'he' instead of 'she'. The relationship between nature and humankind has been established by men and patriarchy for centuries; also, this relationship has been conducted by men all the time. Therefore, this reference does not only prove the duality between men and women but also the domination of mankind over nature. Furthermore, the Sun is the biggest and most powerful planet whose "gravity holds the solar system together, keeping everything from the biggest planets to the smallest bits of debris in orbit around it" (Cermak, 2025). Concordantly, being the strongest planet in the universe is attributed to man related to male domination. This attribution can be interpreted as male domination over nature and women, which causes ecological devastation. Additionally, in patriarchal societies, "the female was seen as the birth giver and child-rearer, while the male was seen as the hunter, provider, and protector" (Gupta et al., 2023, p. 4) addressing the Sun as 'he', implicitly attributes the healer role to men, reinforcing male dominance despite their historically destructive power. Alongside these, at the beginning of the novel, another artificial friend, the Boy AF Rex, says that it does not matter where they are; the Sun always finds them to nourish them (Ishiguro, 2021, p. 3). This belief attributes a kind of divine role to the sun, suggesting that it reaches everywhere and always observes everyone. The AFs' situation on being solar-powered demonstrates the fact that they are in need of the Sun as well.

From the store where artificial friends are sold, Klara observes a building across the street. It is called the RPO building, which can be found in search engines as the

“directions to the Darlington Nuclear refurbishment project office building in Clarington, near Toronto” (Jones, 2021). This building, in the narration, relates to the patterns and the journey of the Sun: “We would see the Sun on his journey, crossing between the building tops from our side over to the RPO building side” (Ishiguro, 2021, p. 3). In the first encounter of Klara and Josie, Josie tells the fact that AFs cannot see where the Sun really goes down because of the RPO building’s tall structure, which blocks the Sun’s journey. Accordingly, there is a conflict between the Sun, which represents nature and the RPO building, which is constructed by human power and symbolizes mankind. The obstructiveness of the RPO building towards the Sun refers to the endless war between nature and mankind; human beings always find ways to be contrary to nature, like cutting trees to create new settlements or uncontrolled hunting that leads to the decline of biodiversity. In this sense, the RPO building, due to its structure, interrupts the journey of the Sun, the nourishment for AFs, and the order of nature as well. When Klara and her AF friend Rosa are in the window of the store for a kind of showroom, Klara’s description of the RPO building is remarkable:

I could see for the first time that the RPO Building was in fact made of separate bricks, and that it wasn’t white, as I’d always thought, but a pale yellow. I could see too that it was even taller than I’d imagined – twenty-two stories – and that each repeating window was underlined by its own special ledge. (p. 9)

Bricks can be regarded as the symbol of civilization and progress because, for thousands of years, they are fundamental building materials that have been used. Humankind builds durable structures by using natural materials like clay, in this way, they prove the fact that they have the capacity to reshape the world like a divine figure and can change the environment. This situation brings about a conflict between nature and humankind; while bricks signify human ingenuity, they highlight the tension between natural landscapes and human constructions. By using natural materials to change the environment, mankind regards himself as a master over nature and sees nature as an object which aims to serve mankind. In this context, by depicting the RPO building’s construction material, Ishiguro underscores the anthropocentric understanding of mankind over nature. In spite of the fact that Klara thought that the

building was white, a colour that symbolizes purity and perfection, the building is pale yellow. Generally, yellow is associated with happiness and joy; “on the other hand, yellow has also been conventionally associated with betrayal and deceit in some Western countries, perhaps because it is associated with danger in nature” (Zhao and Abdullah, 2024, p. 640). In this context, the Sun in the novel is related to bright yellow, which represents energy, joyfulness, vividness and power of nature. However, the pale yellow of the building can be correlated with a threat against nature and artificial energy, which is made by human power. The pale yellow colour can be interpreted as humankind’s desire to control nature, and his willingness to change nature emphasizes human beings’ betrayal of nature. Additionally, Klara’s observation that the building has twenty-two floors, which is longer than she thinks, is proof that mankind’s domination over nature is much bigger than it looks; this makes the reader question the magnitude of the impact of human activities on nature, which harms it. The image and description of the RPO building blur the boundaries between artificial and natural; in this way, Ishiguro helps the reader question the consequences of human damage to nature.

Throughout the novel, the Sun has many symbolic moments and explanations that all actions are happening around it. In the first chapter, which is set in the store, the reader is witnessing the worries of Rex about the Sun and its patterns. When Klara touches the Sun’s pattern, all the sunlight has gone, and Rex blames Klara for being greedy since she takes all the nourishment for herself (Ishiguro, 2021). Rex worries about being weak in the lack of sunlight. This situation proves that the Sun is a source not only for human beings and natural life but also for technology and artificial intelligence, which is created by human beings. Even technology needs nature to perpetuate its existence in the world, just like mankind. It is not possible to exist for both technology and mankind without nature. Moreover, Rex has the fear of being destitute of the Sun and its light. In this way, it is highlighted that the modern world’s alienation from nature and the natural world induces devastating effects on individuals and artificial systems. In this sense, living apart from nature causes both physical and psychological weakness. The reason for Rex’s concern is revealed when a mother and her child come into the shop. The 13-year-old girl thinks that Rex is perfect and suitable for her. However, when her mother asks about the model and gets the answer

that it is B2, she says, “B2, third series. The ones with the solar absorption problems, right?” (p. 6). In addition, it is claimed that this problem can lead to different problems, such as behavioural ones. This serves as evidence that technology is unable to fully process and optimize the unique resources of nature. Challenges have arisen in adapting to nature, and as a result, although humanity strives to overcome nature’s limitations through technological advancements, these limitations persist. Moreover, due to these problems, some artificial friends think that they will never find a home. Thus, the destruction of nature or the decrease of its effect brings not only ecological but also psychological crises such as eco-anxiety, “encompassing feelings of worry, fear and anxiety that arise from awareness of climate change” (Cosh et al., 2024, p. 2). Besides, when Josie and her mother come to the store, Josie’s mother highlights the fact that Klara is not a B3 model:

There was silence, then the Mother said quietly, ‘This one isn’t a B3,
I take it.’

‘Klara is a ,’ Manager said. ‘From the fourth series, which some say
has never been surpassed.’

‘But not a B3.’

‘The B3 innovations are truly marvelous...’ (p. 49)

Unlike B3 models, the inability of Rex, Klara and models like them to absorb enough of the Sun’s energy renders them both physically and emotionally powerless in relation to the Sun’s patterns. The inequality among the artificial friends represents the inequality in modern societies’ access to natural resources and inequitable distribution of natural resources. While B2 models, like Rex, are not able to utilize renewable sources like the Sun, B3 models, which are more developed, can use these sources effectually. Also, Klara observes B3 models in the store and states, “But then I began to notice something odd. During the course of a morning, say, the three B3s would move, little by little, away from the two older AFs” (p. 41). This position can be associated with social ecology, which focuses on the relationship between nature and social structures as well as hierarchies and oppressions shaping this relationship. The attitude of Josie’s mother towards Klara and the B3 models’ moving from older models demonstrates that there is a kind of class distinction and hierarchy between

artificial systems. In this context, the disjunction between B2 models and B3 models is a metaphor for probing the social-ecological dynamics of technological evolution. Not only does this social-ecological metaphor emphasize the unfair distribution of natural resources, but it also sheds light on the fact that technological developments surpass some individuals and groups. Rex's need for the Sun and his inability to fulfil this need reveal the reflections of social inequalities in nature. As stated in previous chapters, social ecology focuses on the concepts of 'hierarchy' and 'domination'; therefore, eliminating hierarchy in this context provides a better understanding of nature.

Klara, who has a strong ability of observation, realizes that the Sun has power over human beings as well as artificial friends in her time in the store. In her duration on the window, Klara witnesses the poignant reunion of Coffee Cup Lady and Raincoat Man. It is a rainy day, and Klara watches people stewardly:

But then suddenly the Sun pushed through, shining onto the soaked street and the tops of the taxis, and the passers-by all came out in large numbers when they saw this, and it was in the rush that followed that I spotted the small man in the raincoat. (p. 23)

Primordially, from the perspective of ecocriticism, it is highlighted that mankind is intertwined with nature, but mankind is often unaware of this relationship or ignores it. In this context, the sudden appearance of the Sun indicates the change in the environment and its effect on people. Due to the sunshine, the crowd on the street has increased; thus, nature presents both physical and societal impacts. Besides, the emergence of the Sun holds deeper social and economic meanings, such as consumerism and capitalism. Through sunlight, the street becomes crowded, and people walk in a rush; this situation highlights that capitalist societies have a culture of fast consumption, and in this way, people are alienated from nature and the environment.

This observation is set in the stage for the introduction of the Raincoat Man. Klara estimates that he is seventy-one years old and occurs with the emergence of the Sun. However, the appearance of the Sun gives the reader a clue about something going to be beautiful. The Raincoat Man is waving and calling as if he is looking for

someone. Then, Klara notices a woman, who is named Coffee Cup Lady by Klara because “from the back, and in her thick wool coat, she seemed small and wide and round-shouldered like the ceramic coffee cups resting upside down on the Red Shelves” (p. 24). The Raincoat Man is trying to take the attraction of Coffee Cup Lady to meet her; then, finally, she realizes him. “Then the Coffee Cup Lady reached the RPO Building side, and she and the man were holding each other so tightly they were like one large person, and the Sun, noticing, was pouring his nourishment on them” (p. 24). In this context, it is essential to highlight that by using the ‘noticing’ expression, Ishiguro personifies the Sun as if nature is an entity that watches people and responds to them deliberately. Thus, an active role instead of a passive one is attached to the Sun once again. Personifying the Sun and nature frequently, Ishiguro aims to not only demolish the centre position of mankind but also to underscore the fact that nature is a kind of power which shapes and leads human behaviour and emotions. In addition, Moore suggests:

Most generally, ecocentric personification works by intersecting the two essential points of rhetoric and ecology: it seeks to *persuade* an audience that all living things are *connected*. It does so by directly addressing ecocritical (and ecological) concerns on at least three major fronts: representation, relationship, and morality. (2008, p. 10)

Moore’s ecocentric personification approach supports Ishiguro’s depiction of the Sun as a morally and emotionally responsive force that plays an active role in restoring lost human connections. Though they appear in the novel for a short time, Raincoat Man and Coffee Cup Lady have a functional role in understanding nature and human relationships. The re-encounter of these two characters represents the unifying and healing power of nature. In this context, the Sun is represented as a physical source of energy as well as a subject that shapes and directs human relations. The relationship between nature and human beings goes beyond the classical conception of a passive nature and becomes a mutual interaction that is a reference to the relationship concept in Moore’s approach. Likewise, Klara’s interpretation of the Sun as a kind of healing, compassionate being shows that she attributes a moral value to nature. The idea that nature can help people and guide their emotional world positions nature as an ethical subject. In this sense, Ishiguro transforms nature from a passive background into an

active narrative element. Further, the way the Sun pours its nourishment represents the power of love, which is associated with the positive effect of nature on life and human beings. The Sun nourishes the moment, which can be considered a sentimental reunion of the Raincoat Man and Coffee Cup Lady. Also, the Sun is represented as a reunion and life-giving source. The fact that the help of the Sun to reunify the lovers is the most powerful symbol of the coexistence of nature and man as a whole. In this way, the Sun's, stated in other words nature's, capacity to help people and unify them is highlighted.

There are other moments that show the value of nature for human beings by depicting the influence of the Sun. Klara, during her time in the window, observes Beggar Man and his dog, who generally wander around. However, on a gloomy day, she discerns that Beggar Man and his dog are lying on the ground, which is considered an important time by Klara. After a while, she realizes that they do not move as if they are dead. She says, "Eventually, the Sun was almost behind the RPO Building, and Beggar Man and the dog were exactly as they had been all day, and it was obvious they had died..." (p. 43). As stated before, the RPO Building, which is made by human power, is associated with a prohibitor force against the Sun and nature since it is the embodiment of the Anthropocentric epoch, in which human structures and technologies increasingly replace and dominate natural entities. The disappearance of the Sun behind the RPO Building symbolizes a situation in which humankind is increasingly alienated from nature and becomes lost in concrete and built environments. This is a metaphor that underlines the alienation of people from nature and its negative consequences in modern society. The absence of the Sun represents the loss of the meaning of human life as well. In this sense, not only is there a deep connection between human life and nature, but also, in a situation of the non-existence of the Sun, human life trails to death. Therefore, Ishiguro underscores the integral function of nature, which is indispensable for mankind, with the presence of the Sun as a symbol of the continuity of life and the richness of nature. If nature, especially such a fundamental resource as the Sun, were to disappear, man's *raison d'être* would also be jeopardized. In this context, the direct impact of environmental factors, such as climate changes, natural disasters, etc., on people's lives is represented. The limits of nature play a decisive role in the struggle for human survival. In Klara's vision, life

ceases to exist in a world without sunlight, symbolizing that environmental changes, such as lack of sunlight, lead to death and extinction. Then, the next day, a beautiful and sunny day is expressed by Klara:

The Sun was pouring his nourishment onto the street and into the buildings, and when I looked over to the spot where Beggar Man and the dog had died, I saw they weren't dead at all – that a special kind of nourishment from the Sun had saved them...They were both hungrily absorbing the Sun's special nourishment and becoming stronger by the minute, and I saw that before long, perhaps even by that afternoon, Beggar Man would be on his feet again... (p. 44)

She realizes that Beggar Man and his dog did not die. By stating her observation in this way, Klara glorifies the Sun as if it is a God. It provides a kind of role that gives life to animate beings with its nourishment, which ensures a chance to survive and rebirth. In this sense, it cannot be denied that the bond between nature and mankind is indispensable. From Klara's perspective, Beggar Man and his dog are dead in the absence of the Sun and its nourishment; however, the next day, thanks to the relation between mankind and nature, the Sun helps Beggar Man, and he survives. Moreover, the fact that it is Beggar Man who is portrayed in this narrative emphasizes that nature is a source of rebirth for outcasts. This situation can be interpreted as a criticism of capitalist and industrial societies as well as a metaphor for the reconstruction of marginalized people within these societies through their connection with nature, which aligns with social ecology's focus on the relationship between hierarchy, social class, and ecology. Not only does the special nourishment of the Sun imply that nature has the ability to balance the differences between classes and the unequal conditions of individuals, but the diffusion of this nourishment into the environment and society is an indication that nature and its resources can be equally distributed to all living beings once the hierarchy is broken. Overall, Klara's observation shows that nature does not discriminate between social classes, that the bond between nature and human beings can never be ignored, and that nature is not only physically but also socially and spiritually significant.

In *Klara and the Sun*, Ishiguro discusses the complex effects of technological progress on nature by addressing current ecological issues, such as environmental degradation and air pollution, through the axis of artificial intelligence and human interaction. In the first chapter of the novel, which takes place in the store, Klara and her artificial companion, Rosa, observe their surroundings. Klara is still fixated on the streets, and the people passing by notice the arrival of a peculiar machine. This machine is referred to as the 'Coatings Machine', a name derived from the label Klara perceives on its exterior and defines its appearance as "First, the overhaul men arrived to prepare for it, marking out a special section of the street with wooden barriers... Then the overhaul men began to drill and break up the ground" (p. 32). This description of Klara creates the image of a heavy, dusty vehicle or road construction machine. Such machines are often used for the purpose of repairing the infrastructure of streets, digging roads or carrying out various construction works. Similarly, Siminaash and Banu describe this machine as "used to rip up the road that spews large clouds of smoke by ultimately blocking out the patterns of the sun" (2024, p. 200). The presence of this machine disturbs both customers and artificial friends. Surrounded by darkness and dust, it creates a distressing atmosphere, to the extent that Rosa covers her ears to block out the overwhelming noise. In this context, the machine mentioned is a noisy and dirty construction, which changes the environmental conditions. Klara witnesses customers talking about air pollution and how air pollution is hazardous for the environment; hence, at first, she thinks that this machine is meant to eliminate air pollution, but when she notices the smoke coming out and that it prevents the Sun, she understands that this is not the true paradigm. She states, "At first the smoke came in little white puffs, then grew darker, till it no longer rose as separate clouds but as one thick continuous one" (Ishiguro, 2021, p. 33). Klara's observation is initially about the conflict between man and nature by revealing how this human-made machine damages nature. Mankind's use of such a machine for its own benefit, in fact, harms nature and thus the planet, which is the only home of mankind. This description in the novel refers to the self-centredness of mankind, that is, the Anthropocene understanding. Although the 'little white puffs' that Klara mentions, which initially symbolize a less harmful, sometimes controllable pollution, gradually become 'darker' and turn into a single 'thick continuous' cloud of smoke, it indicates that environmental degradation is

increasing rapidly and out of control. This situation can be associated with Rob Nixon's 'slow violence' term, which is described as "violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as a violence at all" (Nixon, 2011, p. 2). Therefore, whilst air pollution is not recognized as violence, its effects take time to be understood. This damage to the environment, which is difficult to observe, reveals a violence that affects human life over time. Air pollution is an example of slow violence, which eventually threatens human health and social life. Although Klara's observation portrays the immediate effects of smoke, noise even by mentioning, "But the next day, and the day after, the Cootings Machine carried on, and on, and daytime became almost like the night" (Ishiguro, 2021, p. 34) she refers to the days without light because of air pollution caused by the human-made machine; so, as a long-term effect, artificial intelligence cannot benefit from the nourishment of sunlight in this period and are concerned about this situation. Moreover, Klara worries more than this since she assumes that Josie tried to come to the store during this period and failed because of the air pollution (p. 35). This is an example of the slow violence that air pollution can create in the long term in terms of Klara's whole life. Although air pollution has effects on human health, Ishiguro has thus demonstrated the effects that may occur not only in humans but also in the nonhuman environment. Later, Klara depicts the environment when the Cootings Machine is gone:

Then one morning the grid went up and not only the Machine but its whole special section has vanished. The Pollution too was gone, the gap of sky had returned and was brilliant blue, and the Sun poured his nourishment into the store. The taxis were once more moving smoothly, their drivers happy. Even the runners went by with smiles.
(p. 34–35)

While the Cootings Machine has come with the problem of air pollution, the absence of it is associated with happiness and peace. The bad environmental conditions end, and the absence of this machine not only brings physical betterment but also emotional and physiological recovery. The image of the sky depicted in bright blue signifies the return to the purity of nature and the city's former condition. This portrayal, which is conveyed with the passing of environmental degradation, is a sign

that the liberation of nature from human harm is mutually beneficial to human beings and that a compatible life between humankind and nature will bring tranquillity and pleasure to them. For this reason, Ishiguro refers to the relationship between man and nature with this imagery, implying that living in harmony with nature will bring peaceful and favourable outcomes.

The second part of the novel is set in the house of Josie, a genetically modified child suffering from an unspecified illness, who eventually purchases Klara. As mentioned earlier, the purpose of artificial friends is to help teenagers in their transitional periods. Josie, who is 14 years old, as Klara estimates, is in the process of lifting for her academic success. Though the narrative does not offer a detailed medical explanation, it becomes evident that Josie's condition is connected in some way to the genetic lifting process she has undergone. This background, paired with the family's careful attention to her well-being, subtly reveals how technological interventions in human biology shape not only the body but also the emotional and social environment of a household. Within this space, Klara observes, adapts, and attempts to support Josie, yet her presence also draws attention to the fragility and uniqueness of the human she is meant to assist. One of the striking points about Josie's illness and her genetic transformation is that her mother wants to recreate a new Josie in case of her death. Klara's capability of imitating Josie makes her the best opportunity for Josie's mother's desire. Within the aim of this, Josie, her mother and Klara visit Mr. Capaldi, who is introduced as an artist to make Josie's portrait; however, "Mr. Capaldi's portrait wasn't a Picture or a sculpture, but an AF" (p.230). At this point, the body becomes a phenomenon that is no longer unique but is reduced to a reproducible, functional and controllable structure. According to Haraway, "Biological organisms have become biotic systems, communications devices like others. There is no fundamental, ontological separation in our formal knowledge of machine and organism, of technical and organic" (2016, p. 60). Whereas Klara is a mechanical being and Josie is a genetically engineered human being, both become systems designed to perform specific functions. In this sense, the naturalness of the human body becomes questionable, and the boundary between organism and technical is blurred. Josie's emotional attachments, habits and physical characteristics are turned into data to be

imposed on Klara. In this way, Josie's body and identity transform from being unique to a manufacturable design.

Klara sees the empty body prepared to take Josie's place and learns that the portrait is not a painting at all. She wonders what will happen if she replaces Josie:

'I did wonder. If I were to continue Josie, if I were to inhabit the new Josie, then what would happen to...all this?' I raised my arms in the air, and for the first time the Mother looked at me. She glanced at my face, then down at my legs. Then she looked away and said:

'What does it matter? That's just fabric...' (Ishiguro, 2021, p. 237)

Josie's mother degrades the body into a commodity that can be reduced again. For her, the body is only a carrier since her main intention is to maintain the sense of motherhood that Josie makes her feel, which is only possible with a 'fabric'. The body is turned into an object that only serves; thus, the distinction between natural and artificial becomes irrelevant because the body can always be replaced. This situation reveals a human-centred perspective, as Özdemir and Gündüz state, "The human being, believing that everything around them exists solely for their benefit, perceives themselves as the subject of ownership and justifies every action as a rightful claim derived from the assumption that all things were created for them"² (2022, p. 116). This perspective shows that in the age of the Anthropocene, both artificial and organic beings are evaluated solely on their ability to serve human needs. The metaphor of the 'fabric' reveals that the body has no value in and of itself, gaining meaning only as long as it can fill an emotional or functional gap. Therefore, the individual, whether human or artificial intelligence, gains importance not for its unique existential qualities but for the extent to which it can integrate into the system. In this sense, both nature and the body are reduced to tools to fulfil anthropocentric desires.

In the second chapter of the novel, Josie lives with her mother and Housekeeper, Melania, in a house far away from the city. In addition to her new life and the positions from which the Sun's rays come in this house, Klara depicts the environment that she sees from the window:

² This quotation was translated from Turkish into English by the thesis writer.

The sky from the bedroom rear window was far larger than the gap of sky at the store – and capable of surprising variations. Sometimes it was the color of the lemons in the fruit bowl, then could turn to the gray of the slate chopping boards. When Josie wasn't well, it could turn the color of her vomit or her pale feces, or even develop streaks of blood. Sometimes the sky would become divided into a series of squares, each one a different shade of purple to its neighbor. (p. 61)

Klara describes the scene and sky from the window in a detailed way. She compares what she sees in the store and what she sees in this house. In comparison to the store, this house is far away from the city centre. While there, Klara talks about things like the RPO building and the Tow Away Zone; she mentions the sky and its colours. It is much easier to see the beauties of nature in this place in the absence of human change. Moreover, Klara portrays the colour of the sky as something that changes depending on Josie's mood and health. This change indicates humankind's deep connection with nature and how a person's state of health and their environment can influence each other. For example, when Josie is ill, the sky reflects the physical signs of her syndromes, such as vomiting, pale faces, and traces of blood. Therefore, it is obvious that there is a deep connection between humans and nature that affects humankind in an emotional and psychological way.

After starting to live in Josie's house, Klara meets Rick. Rick is Josie's best friend, and they aim to spend their whole lives together, which they describe this aim as a 'plan'. Klara's first impression of Rick involves a remote control in his hand and machine birds flying in the air: "He had in his hands a circular device and was looking at the sky between the two houses where a group of birds was flying in formation, and I quickly realized these were machine birds" (p. 68). In this context, Rick developed flying mechanical birds, a development that can be associated with the concept of 'biomimicry', which refers to "the practise of making technological and industrial design copy natural process" (Cambridge Dictionary n.d.). The term, coined by Janine M. Benyus, is explained as a new approach associated with societies familiar with dominating nature (Benyus, 2002, p. 2). In other words, biomimicry involves technological designs that are inspired by natural processes. Thus, Rick creates these birds, presumably inspired by nature. These birds refer to how technology, regarded as

a simulation of nature, manipulates nature, functions in a similar way to it or replaces it. The description of these birds could be a reference to the fact that Rick is a very creative and intelligent boy, despite not being lifted, as well as to the decline in biodiversity and, thus, to the degradation and disruptions in the ecosystem. Klara realizes that Rick has switched the pattern of the birds with the remote control in his hand (Ishiguro, 2021, p. 68). Rick's ability to control the mechanical birds so easily with the remote control in his hand can be interpreted as not only mankind's desire to control nature but also mankind's intervention in nature. Moreover, as the artificial replaces the natural, a state in which the natural elements of nature are reshaped by technological intervention emerges. In this sense, the boundary between natural and artificial is blurred, which caused the alienation and disconnection of mankind from the natural world.

There are still natural beauties in this world. One day, the mother promises Josie to go to Morgan's Falls if Josie gets better (p. 97). Therefore, Morgan's Falls becomes a source of hope for healing and motivation to get better in terms of Josie, which is proof that there is a kind of psychological relationship between mankind and nature. Generally, in modern societies of the twenty-first century, nature is regarded as a place to escape from the stressful style of life, which is an outcome of isolation and alienation brought by technological advancements. When Josie is thrilled about Morgan's Falls, she has a desire to escape from the reality of her life and health problems by taking shelter in nature. On the other hand, this desire for escapism can be interpreted as giving a role to nature that attributed a meaningful source of satisfaction by mankind. However, this interpretation objectifies nature by converting it into an instrument in the interests of mankind. Klara asks about Morgan's Falls when she sees the happiness and excitement of Josie, and Josie describes it as "Beautiful is what it is. You'll think it is amazing" (p. 98). Josie's use of the words 'beautiful' and 'amazing' to describe Morgan's Falls frames nature not in terms of its intrinsic value but through a human-centred aesthetic lens shaped by subjective perception and language. As Peter Barry claims, the external world is textualized and constructed linguistically and socially (2002, p. 163). Thus, nature is distanced from its essence and conveyed as a phenomenon that gains meaning from the anthropological point of view. After telling Klara about Morgan's Falls and showing her some photos, Josie says, "People don't

know about Morgan's Falls so much... Maybe it's only me and Mom think it's special" (Ishiguro, 2021, p. 99–100). Her words reflect the contemporary tendency to overlook natural beauty that cannot be commodified or integrated into human-centred utility. This mindset has deep historical roots. With the advent of the Industrial Revolution, the human approach to nature shifted dramatically; nature began to be treated not as a living entity but as a resource to be controlled and extracted for human benefit. As Yurdusev also points out, the Industrial Revolution expanded the scale of industrial activity and simultaneously intensified the environmental degradation caused by technological development (2022, p. 128). In this case, nature, which was thought to be obliged to serve human beings, was ignored when it failed to fulfil this duty; therefore, the bond between nature and human beings was loosened, and human beings were estranged from nature. Josie's words also show that although it is a natural beauty, mankind cannot benefit from Morgan's Falls, cannot materialize it and thereby do not attach importance to it.

On the day, they are planning to go to Morgan's Falls. However, Josie is not well since she has a relapse. There is tension between Josie and The Mother, after which only The Mother and Klara set off for Morgan's Falls. This is a great opportunity for Klara to observe outside, like her times in the store:

We were crossing land that neither rose nor fell, and the sky was still very large. I saw flat fields, empty of barns or farm vehicles, stretching into the distance. But near the horizon was what appeared to be a town created entirely out of metal boxes. (Ishiguro, 2021, p. 111)

Her first observation about the city, especially the expression of 'metal boxes' to portray the city, which is far away, gives significant details about the bond between mankind and nature. In this context, she highlights the fact that not only have modern cities become alienated from nature, but they have been shaped in an artificial and industrial way. The description of the road they take as neither rising nor falling represents the monotony of the city and its people. When the image of 'metal boxes' is attached to this definition, monotony is intensified, and an expression that is far from the uniqueness and diversity of nature is revealed. The 'metal boxes' that Klara uses

to identify the city also have multiple meanings. For instance, this phrase is evidence of the Anthropocene understanding that cities are shaped to provide only human utility rather than the facts and needs of the ecosystem. Thus, cities have become places that disrupt the bond with nature and convert it into a phenomenon that has to satisfy human demands while consuming the resources derived from nature.

Klara and the mother have a conversation on the road, discussing Klara's observations about the city. After the metal boxes city, Klara turns her attention to the tall pipes, which remind her of the Cootings Machine (p. 112). Klara's resemblance to 'the Cootings Machine', referring to industrial pollution, is a symbol of the technology and industry that harms the environment. The fact that Klara is concerned about environmental destruction questions the environmental effects of technology and the destruction of nature by industrialization. Afterwards, the mother states the plant where Josie's father used to work operates with the principle of "clean energy in, clean energy out" (p. 112). On the one hand, this explanation favours the eco-friendly claim of the industry, but on the other hand, Klara's more in-depth questioning perspective and Klara's comparison of this situation to the Cootings Machine imply that the promise of environmental cleanliness may be misleading. The concept of clean energy is becoming a tool used to conceal the environmental impacts of capitalist modes of production. The claim of an industrial plant to produce clean energy can hide larger environmental and ethical questions.

The Mother and Klara stop the car and start to walk. The time of walking is full of experiences such as wind, birds' songs and trees. However, Klara sees something more important:

Just at this point, I happened to look to my left, over the fence running beside us, and saw the bull in the field, watching us carefully...I'd never before seen anything that gave, all at once, so many signals of anger and the wish to destroy...At that moment it felt to me some great error had been made that the creature should be allowed to stand in the Sun's pattern at all, that this bull belonged somewhere deep in the ground far within the mud and darkness, and

its presence on the grass could only have awful consequences. (p. 113)

The presence of the bull terrifies Klara, leading her to believe that it is about to attack them. His anger and wish to destroy can be associated with the destructive potential of nature. The bull's anger can also be related to the fact that nature has a power beyond human power, and this threatens human life. In this sense, when nature feels threatened by mankind, it has the power to destroy everything, including human life. Therefore, the harmony between nature and mankind is so significant that the lack of this harmony can cause harsh consequences. The bull encountered by Klara invites various interpretations, with Ishiguro's Japanese background suggesting a possible influence of Shintoism, which is "a worship of nature, that is, of the material aspects of the physical world personified as gods or goddesses" (Chapter 15: The Worship of the Sun in Japan, 2019). At the beginning of this chapter, the position and deification of the Sun are addressed; therefore, the Sun, in Shinto belief, can be referenced to Amaterasu, who is "the sun goddess and heaven's ruler" (Roberts, 2004, p. xiv). Due to its ability to convey its patterns everywhere and its appearance as a god in Klara's eyes, the Sun can be attributed to Amaterasu. At the same time, the image of the bull represents Amaterasu's brother, whose name is Susano-Wo. In Japanese mythology shaped by Shinto belief, Amaterasu and Susano-wo engage in a contest; Amaterasu creates three female goddesses from Susano-wo's sword, while Susano-wo creates five male gods from Amaterasu's jewellery. Susano-wo, who proclaims himself the victor, acts in a way that causes pollution (Ashkenazi, 2003). In this case, the angry bull that Klara sees can be correlated with pollution, which is one of the most important details in *Klara and the Sun*. Klara's fear and anger towards the bull could be a result of the fact that it triggers her feelings towards pollution. The conflict between Amaterasu and Susano-wo is embodied as the conflict between mankind and nature in the novel. At the same time, Klara states that this bull must have been underground, which is associated with Susano-wo being an underground ruler (p. 259). The relationship between man and nature is not only multi-layered and deep but also reflected in mythology. Consequently, this relationship has existed for a long time. For the continuity of this connection, humankind must learn to coexist in harmony with nature.

Ishiguro also uses the image of the bull, blending it with his own culture to underline harmony with nature.

The return of Morgan's Falls is also full of observations for Klara. She describes the sheep that attracted her attention as:

The car followed a long thin line across the land, and I saw that what at first had appeared to be part of a distant field's pattern was in fact sheep. We passed one field containing more than forty such creatures, and although we were moving very fast, I was able to see that each one of them was filled with kindness – the exact opposite of the terrible bull from earlier. My gaze fell in particular on four sheep that looked even more gentle than the others. They'd arranged themselves on the grass in a neat row, one after the other, as though proceeding on a journey. (p. 120–121)

Seeing the sheep looking compassionately after the angry bull is extremely important in terms of the definitions of nature; while nature has a wild aspect, it at the same time has a compassionate aspect. When human beings do not get along well with nature, nature emerges as a destructive force. Otherwise, it offers peace and calmness. The description of Klara's sheep as full of kindness shows that nature can exist not only as a threat to humans but also as a harmonious entity that offers compassion and nourishment. Thus, this image shows that nature's relationship with humans is more a matter of balance; nature, therefore, contains both danger and peace. These images, which Ishiguro uses to reveal the identity of nature, turn nature into a subject with its own linearity and process instead of an object. Besides, mankind extensively utilizes sheep, producing food from its meat and clothes from its skin, etc. The use of the sheep image, in this case, can be considered as the benefits that nature offers to human beings, which is a situation that feeds the Anthropocene understanding that human beings have. Ishiguro's portrayal of sheep in such a way enables him to provide a critical perspective on the sheep and, hence, on nature, which mankind uses for its own benefit. In addition, Klara focuses on especially four sheep; the symbolism of four is significant in nature. The number four can be associated with the four seasons, which symbolize balance and order in Earth and nature. In this sense, Ishiguro highlights the

fact that seasons represent a natural cycle and order; therefore, in these phases that nature goes through, mankind adapts to nature for the sake of survival. On the other hand, the number four can represent four elements in nature, which are air, fire, Earth and water. A representative example of this is the symbolization of the four elements as rock, clouds, flames and water in William Blake's poem "The Four Zoas". Claiming that the four divergent images of nature are used as symbols that enable human beings to receive a brief and insightful gaze into eternity and universal truth, Shaw states that "Each image can point either towards death or towards life, and we must remember that the ambiguities of these images are a sign of hope in the already fallen world" (1973, p. 24). Therefore, the four sheep that Klara sees, especially the four she asserts to be kinder, can be interpreted as indicating that there is still hope for the planet and that harmony with nature is the way to achieve this. Moreover, the fact that the sheep appear to be on a journey and the depiction of their slow movement stresses that nature is in a cycle and a process of transition that never ends.

In Morgan's Falls, the mother wants Klara to replace Josie if it is necessary one day; however, Klara believes that the Sun will help Josie by using its own special nourishment "as he'd done for Beggar Man and his dog" (Ishiguro, 2021, p. 129). In spite of Klara's hopeful waiting, the nourishment of the Sun cannot be received, and Josie's situation is getting worse day by day. In addition to Josie's sickness, after a while, due to the disagreement between Rick and Josie, who spend time together, Josie composes a letter for Rick and wants Klara to deliver this letter to Rick. Klara takes advantage of this situation, and after Rick's house, she decides to go to Mr McBain's barn where, as she believes, the Sun goes for his rest (p. 62). Whilst she is determined to get to the barn, the road is challenging for her:

One moment the grass would be soft and yielding, the ground easy to tread; then I'd cross a boundary and everything would darken, the grass would resist my pushes, and there would be strange noises around me, making me fearful that I'd made a serious miscalculation, that there was no justifiable reason to disturb his privacy in the manner I was hoping to do, that my efforts would have gravely negative consequences for Josie. While crossing one

particularly unkind box, I heard around me the cries of an animal in pain. (p. 175)

The fact that the grasses are tender at the beginning and then resist in a way to challenge Klara can be attributed to the rebellion of nature. Nature is in harmony with human beings but becomes resistant if the boundaries are crossed. Therefore, when human beings push the boundaries of nature for their own interests, nature takes action, and its reactions are revealed in a manner that compels human beings. The resistance of nature is related to the deterioration of its environmental balance; nature resists in order to maintain the balance, so it can be regarded as a kind of self-defence. Since nature does not recognize Klara's intention at this point, after a while, it resists in order to protect its own cycle and process. Klara's hearing animal cries are interpreted as the crying of nature. Nature, which is consumed and exploited by human beings, emerges as an animal cry in the novel. The fact that this sound is specifically mentioned as an 'animal' cry can also be a reference to the reduction of biodiversity and, thus, disruptions in the ecological chain. During her journey, Klara also recalls the bull she saw at Morgan's Falls: "I remembered the terrible bull on the walk up to Morgan's Falls, and how in all probability it had emerged from beneath the ground" (p. 175). Previously, the bull had been expressed as Susano-wo, associated with pollution; by Klara's recalling the image of the bull during the resistance of nature, Ishiguro evokes once again the pollution created by humankind and the damage it causes to nature. On the other hand, recalling the image of the bull could refer to nature's anger towards mankind because of its Anthropocene idea, which puts human beings in the centre.

When Klara arrives at the barn, she thinks about what she will say to the Sun for the sake of Josie: "So I gathered my thoughts and began to speak. I didn't actually say the words out loud, for I knew the Sun had no need of words as such" (Ishiguro, 2021, p. 184). The situation of Klara going to the barn and asking for help from the Sun turns the barn into a temple and the Sun into a God; she thinks that the Sun does not need words because of its position as a God who knows everything. She puts her request for help into words: "Please make Josie better. Just as you did Beggar Man" (p. 184). Throughout the novel, when Klara's relationship with the Sun is analyzed, it is actually quite acceptable for her to go and worship it and deify it in some way. Although Klara is an artificial intelligence, which makes her different from human beings in terms of

emotions and physical appearance, she observes the environment as human beings do. She learns everything through her observations, and this situation creates a relationship between Klara and nature. Klara's admiration for the Sun, while initially a pure and innocent admiration like a child, turns into a deeper inner discovery over time, and finally, she contemplates that everything in the world is related to the Sun, which can be considered as the most powerful source. As a result of her observations, Klara distinguishes between good and evil, so that her acceptance of the Sun as good is the beginning of a process of deification. This process is parallel to Klara's inner transformation and her admiration for the natural world. Klara's worship of the Sun is a deep devotion to the power of nature and the source of life it offers for humanity. However, it seems that the Sun is unwilling to help them since it is not possible for the Sun to "see Josie separately from the other humans, some of whom had angered him very much on account of their Pollution and inconsideration" (p. 184). Her opinion is a reference to the alienation between mankind and nature.

Klara believes that the reason for the absence of the Sun's nourishment for Josie is that Beggar Man and his dog are in a place where people see them a lot while Josie is far away from eyes as well after the Cootings Machine disappears, and the Sun nourishes them. Therefore, Klara thinks that she needs to stop pollution in a way to get the help of the Sun. This agreement seems like a kind of religious offering, and when it is thought that human beings anticipate many things from nature, it is comprehensible to make a vow for Josie. Klara is aware of the fact the Sun and nature are damaged by air pollution, which is created by human beings:

I know how much the Sun dislikes Pollution. How much it saddens and angers you. Well, I've seen and identified the machine that creates it. Supposing I were able somehow to find this machine and destroy it. To put an end to its Pollution. (p. 186)

Klara's thoughts show that the Sun, which has utmost importance in ecology and represents nature, is angry at the Cootings Machine and air pollution because of their damage to Earth. The Cootings Machine, made by human power, destroys nature and ecological balance. For this reason, according to Klara, the Sun will be contented and satisfied with the ending of the Cootings machine and its pollution. Thus, he will be

able to help Josie, who suffers from a disease. Klara states that she found the machine which creates air pollution; however, it is clear that pollution will not be over with the absence of one machine since human beings tend to create many of them to continue their lives without regard for nature. Furthermore, the spread of pollution from a machine can be a reference to capitalism, which is associated with social ecology. Capitalism, aiming to grow continually and to make a profit, exploits nature and its sources for the well-being of the system and mankind. In addition, Klara, who is an artificial intelligence, is aware of the fact that a machine created by humans wrecks nature. Awareness of artificial intelligence towards nature is an ironic situation because, while human beings regard nature, Klara tries to change some things for the sake of nature. In this way, Ishiguro criticizes the alienation of mankind from nature.

Klara needs a plan to annihilate the machine, and going to the city for Josie's portrait is the best opportunity in terms of exterminating the Cootings Machine. In this sense, under the excuse of looking for her old store, she sees the Cootings Machine:

But I had no more time to think about the store, for what I saw next – between the two front seats – was the Cootings Machine. I recognized it before we were close enough to see the name on its body. There it was, throwing out Pollution from three funnels the way it had always done. I knew I should feel anger, but coming on it after the surprise about the store, I felt something almost like kindness towards the terrible machine. (p. 214)

She emphasizes the description of the machine by indicating that it has three funnels, which cause air pollution. This description symbolizes the environmental degradation that highlights both technology and industry damage to nature. Moreover, by stating 'it had always done', Klara indicates the truth of the normalization of harmful effects of technology and industry towards nature. In the eyes of mankind, environmental degradation, which is created by technology and industrial processes, has become so ordinary that it has gradually evolved into a part of everyday life. Mankind is accustomed to this situation since their interest is prioritized over nature, which can be regarded as Anthropocene understanding; however, they are not aware of the fact that they have to live in harmony with nature for a better lifetime. Also,

Klara claims that people who see the machine destroyed will be contended (p. 248) because these people have become a cog in the wheel that damages nature. When they see the favour granted to nature, they will feel free and get rid of the estrangement from nature they live in. Yet, some people, such as Josie's mother, Chrissie, who criticizes the air pollution caused by machines, question how society can get away with it (p. 292). Additionally, Klara almost feels kindness towards the Cootings Machine; her feeling represents human beings' conflict between nature and technology. People in the modern age have become addicted to technology, causing environmental degradation. Therefore, they experience both anger and goodness towards it. In other words, modern society is stuck between environmental awareness and technology addiction. This tension reflects a rational dilemma and an emotional one as well since, as noted in recent ecocritical scholarship, "the complexity and intricacies of natural phenomena cannot be fully encapsulated by statistical data alone, and the emotional and affective dimensions of human-nature interactions cannot be ignored" (Toska, 2024, p. 838). This perspective underlines that environmental ethics must consider not just empirical data but also the affective and relational dimensions that shape our connection to nature.

Klara and Josie's father, Paul, find a resolution which seems possible to destroy the Cootings Machine thanks to Paul's professional knowledge of engineering. Klara has a kind of solution in her head which is named 'P-E-G Nine', and she states, "My mind was filling with great fear, but I said: 'But Mr Paul believes if we could extract the solution, we could destroy the Cootings Machine.'" (p. 251). Klara is aware of the ecological problem caused by the machine and air pollution; even if she feels 'fear', she must overcome her fear in the face of this ecological crisis because she is in desperate need and realizes that Josie needs help. Klara's ambition in order to stop the machine's pollution is remarkable since, while modern society is insensible in terms of nature and ecological problems, Klara takes environmental responsibility and does her utmost for nature. In this sense, Ishiguro criticizes modern society's self-centeredness as well as the Anthropocene idea. While Klara's actions reflect an alternative sense of responsibility and solidarity with nature, modern society's liberal ideals, such as individualism and freedom, are implicitly questioned in the novel. Timothy Clark notes:

The retrospective light of the Anthropocene casts into new relief developments that many regard as human advances, including social changes such as the rise of the liberal values of individualism, and personal freedom, for these cannot now be disengaged from such environmentally degrading impacts as increased consumption, individual property rights, growing markets and expanded resource use. (2015, p.52)

Klara's empathy and devotion to nature reinforce the idea that human beings should have a reciprocal and holistic relationship with nature. Ishiguro, thus, exposes the unsustainable path of modern civilization while at the same time offering a hopeful perspective that the relationship between humanity and nature can be reshaped on the basis of love, responsibility and ecological awareness.

Klara trusts Paul and allows him to remove the liquid from her head so they can defeat the machine. Despite the fact that Klara does this for Josie, it is a favour to nature. Unlike humans, Klara cares about nature and concludes an agreement over nature for Josie. In this way, she will help both Nature and Josie. Klara sacrifices by using her own solution for the destruction of the machine. Thus, Ishiguro emphasizes the importance of individual sacrifice in environmental crises. On the other hand, individual sacrifices and efforts are not sufficient for ecological problems; Klara encounters a different landscape on her way back after destroying this machine "We moved beyond the New Cootings Machine and the grey pollution mist drifted past the windshield" (p. 292). Klara is disappointed to find that there is another one of the same machines, but she has done all she can in her deal with the Sun, and when the help for Josie she expects does not arrive, she goes to Mr McBain's barn and expresses her disappointment:

I let him down, failing completely to stop Pollution. In fact, I see now how very foolish I was in not considering there'd be a second terrible machine to allow Pollution to continue without a pause. But the Sun was watching at the yard that day, so he will know how hard I tried, and how I made my sacrifice, which I was only too pleased

to do, even if now my abilities aren't perhaps what they were. (p. 301)

Klara believes that she can stop Pollution; however, the destruction of a single machine proves insufficient to curtail pollution or environmental degradation. This underscores the reality that individual solutions are inadequate to resolve complex ecological crises. Addressing environmental challenges necessitates sustained and systemic processes that persist over time. While individual efforts and sacrifices are vital, modern society must transcend its anthropocentric paradigm, which perpetuates human dominance over and exploitation of nature, to embrace a more holistic and equitable ecological framework. Moreover, the existence of the second machine emphasizes the continuity of technology, which harms nature.

After her words for the Sun, she remembers the bull which she saw in Morgan's Falls; she recalls its dark eyes, horns and anger unsettling her (p. 302). Klara's recollection of the bull after asking the Sun for help for Josie indicates that she also embraces the Anthropocene perception. Although she is not at the centre, Klara puts Josie, a human being, at the centre with her words to the Sun and says that the Sun should help her. Even though Klara's mission has failed, she reminds the unification of Coffee Cup Lady and Raincoat Man: "I'm remembering how delighted you were that day Coffee Cup Lady and Raincoat Man found each other again...So I know just how much it matters to you that people who love one another are brought together, even after many years" (p. 304). She places the Sun in the role of a god who unites those who love and asks him to do the same for Rick and Josie, for whom she believes their love is eternal. In addition to the deification of nature at this point, it cannot be said that Klara has an earth-centred standpoint. Later, she recalls Miss Helen's request for a favour for her son Rick from her former love, Vance. Previously, she also reminisced about Morgan's Falls, where Josie's mother, Chrissie, had privileged her. At the end of the day, Klara also asks the Sun for a favour for Josie's sake. The desire for favouritism shows that humankind sees nature as an entity that serves the well-being of humanity. A comparable attitude can be observed in Shintoism, where individuals write personal or communal wishes on ema, "the votive tablets upon which people write requests and imprecations to the deities and buddhas" (Reader, 1991, p. 23), believing that the natural spirits kami may grant those requests. As much as Klara

deifies the Sun, she attributes to it missions such as providing nourishment for artificial intelligence, healing people (Beggar Man and his dog), and uniting lovers (Coffee Cup Lady and Raincoat Man). This shows that the Sun, and therefore nature, has no purpose in itself; it is tasked with serving humans and the artificial intelligence that has emerged to prove the needs of human beings. The help Klara has been waiting for finally arrives, and Josie “grew not only stronger but from a child into an adult” (p. 319). A nonhuman, transhuman entity is portrayed as helping a human being. Josie gets better both physically and emotionally when she becomes an individual. In this sense, Ishiguro, through Klara’s narration, reflects the deep connection of the human life cycle with nature and the transformative impact of nature on individuals.

5. CONCLUSION

Ecological crisis, as one of the most essential issues of the twenty-first century, challenges anthropocentric worldviews and requires a radical reconsideration of human beings' relationship with nature and technology. With its increasing visibility in cultural and environmental discourses, the ecological crisis has become a central issue in literary criticism and contemporary literature, particularly in speculative and dystopian narratives. Thus, in the 1990s, ecocriticism emerged, which, in the most basic definition, analyzed the relationship between literature and nature; moreover, the twenty-first-century novelists focused on the condition of nature, ecological crises and the fallacy of human beings' self-centred perception. Both the growing environmental destruction and the depth of its reflections in literary works have led this thesis to analyze two twenty-first-century novels that discuss the relationship between humans and nature, the representation of nature and the boundaries between nature, technology and human beings through the framework of ecocriticism.

This thesis analyzes two contemporary twenty-first-century novels, *The Windup Girl* by Paolo Bacigalupi and *Klara and the Sun* by Kazuo Ishiguro, through the possibilities offered by ecocriticism in their fictional worlds where human, nature and technology relations are reconfigured and the representation of nature changes. The novels are analyzed in terms of their depictions of nature, environmental disasters, the broader ecological structure shaped by the climate crisis, and the connection between genetic interventions and nature. Both novels reveal the crisis-generation nature of the anthropocentric perspective by reflecting the irreversible effects of human intervention on nature, one of the defining features of the Anthropocene epoch. In particular, the representation of nature not as a background element but sometimes as an active subject or a meaning-making structure coincides with the current tendencies of ecocriticism. In this context, the thesis discusses representations of nature, the Anthropocene approach and the consequences of genetic modification.

The first analysis chapter focuses on Paolo Bacigalupi's *The Windup Girl* through an ecocritical lens. The novel presents a dystopia in which global ecological collapse, genetic engineering and corporate domination reshape the world. It deals with the consequences of human exploitation of nature and is shaped around themes

such as environmental destruction, biotechnology and social inequality. The analysis begins by examining the novel's setting, which portrays a chaotic world overwhelmed by the consequences of climate change. In this dystopian future, natural resources have been exhausted, and genetically engineered food monopolies control entire nations. Thailand stands out as the only country resisting this ecological collapse, primarily due to its preservation of natural seed banks, which is a rare remnant of unmodified nature. Within this framework, nature is not appreciated for its intrinsic value but is treated as property, essential only for human survival. Set in a post-apocalyptic era, after the Contraction period, the novel presents a world plagued by genetically induced diseases, rising sea levels, and irreversible environmental damage. From an ecocritical standpoint, the novel clearly reveals that the root cause of this devastation is anthropocentrism, which is related to the tendency to objectify and exploit nature according to human needs and desires. Moreover, the power struggle between two ministries in Thailand has led to the implication that the ecological crisis is directly linked to social inequalities, as social ecology claims. Megadonts genetically engineered from elephants for energy production, Cheshire cats created for a company owner's daughter's birthday party, and the ivory beetle, which is designed to look beautiful but disrupt the ecological chain, are all genetically modified animals. The biologically constructed body presented through the character of Emiko is a concrete example of both capitalist exploitation and detachment from nature. Increasing genetic modification results in a disruption of the ties between technology and nature and a blurring of the lines between the artificial and the natural. The identification of Anderson's character with solastalgia and his search for Eden, the interaction of the characters with the Bo tree, which is considered sacred, and the reflection of the disappointment and hopelessness brought about by the ecological crisis on the characters reveal the idea that ecological crises are phenomena that not only affect the ecosystem but also affect the human psyche. Overall, the novel reveals how the anthropocentric mindset and the commodification of nature contribute not only to ecological collapse but also to psychological and societal breakdowns by presenting an entanglement that ecocriticism seeks to unravel by highlighting the interconnectedness of human and nonhuman worlds.

The second analysis chapter of this thesis deals with *Klara and the Sun* by Kazuo Ishiguro. It focuses on representations of nature through, starting in a store and ending in a waste landfill, the observations of Klara, an artificial friend who supports a teenager's, Josie's, lifting process, which is a genetic modification. Klara's connection with the Sun leads her to assign many roles to it, such as lifesaver, healer, source of reunion and god. As a result of these roles given to the Sun, it is assumed that the Sun, and therefore nature, has shifted from the role of an object to that of a subject. However, since Klara asks the Sun to help Josie, nature is also assigned the role of a phenomenon that serves human beings, thus revealing an anthropocentric point of view. The fact that the RPO building, which is built by mankind, blocks the Sun is a reference to the conflict between nature and mankind; thus, once again, the existence of an Anthropocene understanding is concluded. The increasing presence of air pollution has been associated with the concept of 'slow violence', suggesting that its impacts on ecology and human beings are increasing gradually. Considering the relationship that models of B2 and B3 establish with nature from the perspective of social ecology, it is concluded that to solve ecological problems, hierarchical problems must also be solved. The process of lifting that Josie and other teenagers went through in order to be able to exist in the academic field is related to genetic modification. Therefore, it is concluded that the human body only serves Anthropocene interests and desires and is alienated from the natural. The figures of the Sun and the bull that appear throughout the novel are mythologized based on Ishiguro's Japanese roots, thus proving the presence of nature in every aspect of human life. In this context, *Klara and the Sun* offers a unique ecocritical perspective by illustrating how the boundaries between the natural and the artificial blur in the Anthropocene, ultimately emphasizing that ecological crises are inseparable from the ways in which humanity constructs, manipulates, and mythologizes nature.

Both novels focus on the representation of nature, ecological problems and the consequences that can arise from them in the future. However, Bacigalupi prefers a dystopian and harsh ecological landscape on the brink of destruction, while Ishiguro chooses a quiet, more individualistic and introspective atmosphere. In addition to ecological destruction and the prevailing Anthropocene mindset, the main point that unites the two novels is the ecocritical dimensions of genetic alterations to the human

body. Consequently, this thesis, by analyzing two contemporary novels which deal with different narration universes focusing on ecological degradation, genetic engineering and the dissolution of the relationship between nature and mankind, reveals a multilayered structure of literary representation of the human and nature relationship. The analysis throughout this thesis has shown that ecological crises are directly related to social inequality, ethical dilemmas and human psychology, as well as environmental problems. This comparative analysis from an ecocritical perspective proves that nature is not just a backdrop or a background but an element at the core of the narratives and intertwined with the inner transformations of the characters. One of the most important contributions of the study is that it shows that ecological destruction is represented in literature in terms of physical consequences and cultural, technological and individual dimensions and sheds light on the interdisciplinary nature of ecocriticism in this context.

GENİŞLETİLMİŞ ÖZET

Ekoleştirici Işığında 21. Yüzyıl Romanları: Paolo Bacigalupi'nin *Kurma Kız*'ı ve Kazuo Ishiguro'nun *Klara ile Güneş*'i

İnsan ile doğa arasındaki ilişki, yaratılıştan bu yana süregelen güçlü ve yadsınamaz bir bağıdır. Bu ilişki, tarih boyunca farklı biçimlerde kendini göstermiştir; kimi dönemlerde uyum içinde gelişen bu etkileşim, bazı zamanlarda ise insanın doğa üzerindeki üstünlük kurma arzusu nedeniyle çatışmalı bir niteliğe bürünmüştür. Doğa, yalnızca çevresel bir unsur olarak değil, aynı zamanda mitolojilerde, dini anlatılarda ve felsefi düşüncelerde merkezi bir yer edinmiştir. Ancak insanın doğaya olan bağımlılığına ve yaşamsal ihtiyaçlarına rağmen, onu kontrol etme isteği modern çağın sunduğu teknolojik imkanlarla birleşince, bu denge bozulmuş ve ciddi ekolojik krizleri beraberinde getirmiştir.

Edebiyat, her daim içinde üretildiği dönemin sosyal, politik ve çevresel dinamiklerini yansıtan bir ayna görevi görmüştür. Bu bağlamda, çevresel krizlerin yoğunlaştığı Yirminci yüzyılın sonlarına doğru, çevre sorunlarını odağına alan ekoeleştirici adlı disiplinler arası bir alan ortaya çıkmıştır. Ekoleştirici, en temel tanımıyla edebiyat ve doğa arasındaki ilişkiyi analiz eden bir yaklaşımdır. Bu alan, derin ekoloji, toplumsal ekoloji ve ekofeminizm gibi alanlardan etkilenmekle kalmamış; Cheryl Glotfelty, Lawrence Buell ve William Rueckert gibi isimlerin katkılarıyla gelişmiş ve zenginleşmiştir. Postmodernizmin toplumdaki geleneksel kalıpları ve ikilikleri yıkmasıyla öne çıkan bir kolu olarak ekoeleştiricinin temel kaygısı, Batı düşüncesinde uzun süredir yerleşik olan ikili karşıtlıklara, özellikle de doğa ve kültür arasındaki ikiliğe meydan okumasıdır. Bu karşıtlıklar sadece felsefi ve bilimsel söylemi etkilemekle kalmamış, aynı zamanda edebiyattaki temsili de derinden şekillendirmiştir. İnsan merkezli düşünce yapısına, yani antroposen bakışına karşı bir duruş sergileyen ekoeleştirici; dünyayı, yerküreyi ve doğayı merkeze alarak doğayı edilgen bir nesne olmaktan çıkarıp etkin bir özne hâline getirmeyi amaçlar. Bu yaklaşım, edebi eserlerde doğanın temsiline yönelik daha derinlikli ve eleştirel bir okuma önerir.

Yirmi birinci yüzyıl romanları, çevresel sorunlara yalnızca doğrudan temsillerle değil, aynı zamanda spekülative ve distopik kurgu aracılığıyla da dikkat çekmektedir. Yirmi birinci yüzyıl edebiyatı, insanmerkezci anlatı yapılarının ötesine geçen ve insan dışı varlıklara, doğal döngülere ve ekosistemlere öznellik kazandıran yeni bir temsil dili inşa etmektedir. Bu bağlamda, edebi metinler okuru çevresel yıkıma tanıklık etmeye ve bunun etik, siyasi ve varoluşsal sonuçlarını sorgulamaya davet etmektedir. Bu tez, Paolo Bacigalupi'nin *Kurma Kız* ve Kazuo Ishiguro'nun *Klara ile Güneş* adlı romanlarını ekoeleştirici bir perspektiften incelemektedir. Her iki eser de, yakın ya da uzak gelecekte geçen kurgularında doğa temsillerine, insan-doğa ilişkisine ve teknolojinin insan doğası üzerindeki etkilerine odaklanmaktadır. Bu nedenle, bu tez için bu iki roman seçilmiş ve yirmi birinci yüzyıl kurgularında doğa ve insan ilişkisinin nasıl yeniden inşa edildiği ekoeleştirici bağlamında incelenmiştir. Antroposen anlayışının etkisinde şekillenen bu romanlar, doğanın nasıl bir özneye dönüştüğünü ve teknoloji ile doğa arasındaki sınırların nasıl yeniden çizildiğini edebi düzlemde tartışmaya açmaktadır. Bu tezde, doğanın temsili ve ekolojik sorunlar ekoeleştirici kuramı üzerinden tartışılmakta ve romandaki alıntılar yakın okumalarla analiz edilmektedir.

Bu çalışmada, özellikle insan, doğa ve teknoloji arasındaki ilişkinin geçirdiği dönüşüm kritik bir noktada ele alınmakta; yapay ve doğal arasındaki sınırların muğlaklaştığı temsiller analiz edilmektedir. *Kurma Kız* ve *Klara ile Güneş* romanları, hem distopik öğeleri hem de insan bedenine yönelik teknolojik müdahaleleriyle, insan-doğa ilişkisine dair etik ve çevresel sorumluluğu tartışmaya açan metinlerdir. Romanlarda tarif edilen atmosfer ekolojik krizlerin ve çevresel sorunların arttığı öğeler barındırmaktadır. Aynı zamanda, Josie ve Emiko adlı karakterler, yapay bedenler ve doğallığın sınırında varlık gösteren figürler olarak, bu tartışmanın merkezinde yer almaktadır. Josie, genetik müdahale sonucu hasta düşen bir çocuğu temsil ederken; Emiko, insan eliyle tasarlanmış, biyolojik olarak üretilmiş bir ‘Yeni İnsan’dır. Bu karakterler üzerinden hem biyoteknolojiye hem de doğa kavramının yeniden tanımlanmasına ilişkin okumalar yapılmaktadır.

Tezin temel amacı, bu iki roman aracılığıyla çağdaş edebiyatın ekolojik krize karşı verdiği eleştirel yanıtları analiz etmektir. Teknolojik ilerlemelerin insan ve doğa arasındaki bağı nasıl dönüştürdüğü, bu dönüşümün bireysel ve toplumsal düzlemde ne tür sonuçlar doğurduğu sorgulanmaktadır. Edebi metinlerde yapay zeka, genetik mühendislik ve biyoteknoloji gibi alanların doğa ile kurduğu ilişki, çevresel etik bağlamında değerlendirilmektedir. Bu tezdeki analizler, ekoeleştirici ile ilişkilendirilen birçok teorisyenin düşüncelerine dayandırılmıştır. Haraway’ın siborg kavramı, Emiko ve Josie gibi sınır karakterlerin analizinde etkili bir kuramsal araç olarak kullanılmıştır. Emiko, bir cyborg gibi hem insan hem de insan ötesi özellikler taşıırken; Josie, doğal bir bedenin içindeki yapay müdahalelerin sonucunda oluşan kırılganlığı temsil etmektedir. Bunlara ek olarak, ekoeleştirici alanında duyguların ve psikolojik etkilerin önemi de vurgulanmıştır. Glenn Albrecht’in ortaya koyduğu, kişinin çevresindeki doğal ortamın yitilmesiyle yaşadığı kaygı ve melankoli anlamına gelen solastalji kavramı *Kurma Kız*’da yer alan Anderson karakteri üzerinden anlam kazanmaktadır. Aynı şekilde, Toska’nın duygusal ekoloji üzerine çalışmaları da *Klara ile Güneş* üzerinden örneklendirilmiştir.

Kurma Kız adlı romanda, daralma döneminden sonra kıyamet sonrası bir çağda geçen roman, genetik olarak tetiklenen hastalıklar, yükselen deniz seviyeleri ve geri dönüşü olmayan çevresel hasarlarla boğuşan bir dünya sunmaktadır. Tayland’ın kıyısında biyoteknoloji sonucu üretilmiş hayvanlar, meyveler ve Emiko gibi “Yeni İnsanlar”ın varlığı, doğanın ne ölçüde insan eliyle dönüştürüldüğünü gözler önüne sermektedir. Eserde, genetik mühendislik sonucu ortaya çıkan organizmalar doğayla kurulan yeni ilişkinin göstergeleri olarak okunmaktadır. Bir başka açıdan, eserde, insanoğlunun doğadan ayrı değil, doğanın kendisi olduğuna dair bir argüman sunulmaktadır. Ancak bu argüman, doğayla bütünleşme arzusundan ziyade insanoğlunun doğa üzerinde mutlak hâkimiyet kurma çabasının meşrulaştırılmasıdır. Bu indirgemeci doğa tanımı, insanın doğa üzerindeki yıkıcı etkilerini doğallaştırarak sorumluluğu ortadan kaldırmayı amaçlamaktadır. Bu bağlamda metin, Antroposen çağının belirleyici özelliği olan insan merkezli doğa anlayışını eleştirel bir şekilde ortaya koymaktadır. *Klara ile Güneş* romanında ise, bir mağazada başlayıp bir atık bölgesinde sona eren eser, bir gencin yani Josie’nin, genetik bir modifikasyon olan yükseltme işlemi sürecinde ona yardım eden yapay arkadaş Klara’nın gözlemleri aracılığıyla doğanın temsillerine odaklanmaktadır. Klara’nın, Güneş’e yönelik mistik bir bağlılık geliştirmesi ve Josie’nin yükseltilmiş biyolojik yapısıyla yaşadığı fiziksel kırılganlık, hem doğa-insan ilişkisine hem de teknolojinin etik boyutuna dair

tartışmaları gündeme getirir. Klara'nın Güneş'i bir iyileştirici güç olarak görmesi, doğaya atfedilen kadim rollerin teknolojiyle nasıl iç içe geçtiğini gösteren sembolik bir anlatıdır, Güneş'e atfedilen roller ile onun edilgen nesne rolü etkin bir özneye dönüştürülmüştür. İnsan olmayan, insan ötesi bir varlık bir insana yardım etmektedir. Josie hem fiziksel hem de duygusal olarak iyileşir ve bir birey haline gelir. Bu anlamda Ishiguro, Klara'nın anlatımı aracılığıyla insan yaşam döngüsünün doğayla olan derin bağını ve doğanın bireyler üzerindeki dönüştürücü etkisini yansıtır.

Sonuç olarak, bu tez, yirmi birinci yüzyıl ekoeleştirisinde doğa, insan ve teknolojinin birbirine geçmiş, karmaşık ilişkisini analiz etmektedir. Seçilen iki roman aracılığıyla, çağdaş edebiyatın çevresel krizlere nasıl yanıt verdiği, bireyin bu krizler karşısındaki duygusal duruşunun nasıl şekillendiği, doğa kavramının nasıl dönüştüğü ve temsil edildiği ortaya konmaktadır. Tezin temel iddiası, doğanın sadece fiziksel bir çevre değil, aynı zamanda toplumsal, kültürel ve teknolojik bağlamlarda yeniden tanımlanan bir özne olarak edebiyatta yeniden konumlandırıldığıdır.



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