

DOKUZ EYLÜL UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
DEPARTMENT OF AMERICAN CULTURE AND LITERATURE
AMERICAN CULTURE AND LITERATURE PROGRAM
DOCTORAL THESIS
Doctor of Philosophy (PhD)

**RETHINKING HUMANITY IN THE ANTHROPOCENE:
A POSTHUMANIST READING OF MARGARET
ATWOOD'S *MADDADDAM TRILOGY* AND RICHARD
POWERS' *THE OVERSTORY***

Gökçen ERALAN COŞKUN

Supervisor
Assoc. Prof. Esra ÇÖKER

2025

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I hereby declare that this doctoral thesis titled as “Rethinking Humanity In The Anthropocene: A Posthumanist Reading Of Margaret Atwood’s *Maddaddam Trilogy* And Richard Powers’ *The Overstory*” has been written by myself in accordance with the academic rules and ethical conduct. I also declare that all materials benefited in this thesis consist of the mentioned resources in the reference list. I verify all these with my honour.

Gökçen ERALAN COŞKUN

15.5.2025



ABSTRACT

Doctoral Thesis

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**Rethinking Humanity in The Anthropocene: A Posthumanist Reading of
Margaret Atwood's *Maddaddam Trilogy* and Richard Powers' *The Overstory*
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Dokuz Eylül University

Graduate School Of Social Sciences

Department of American Culture and Literature

American Culture And Literature Program

Through a posthumanist lens, this study critically engages with contemporary literature to examine the dynamic interplay between human and non-human entities in the Anthropocene. Focusing on key concepts such as human and non-human agency, multispecies living, storytelling, and posthuman ethics, the analysis challenges traditional anthropocentric frameworks. It explores how agency -once considered an exclusively human attribute- extends to non-human actors, including plants, animals, and technology, all of which actively shape and influence ecological and narrative realities. The narratives within the selected works serve as compelling mediums through which these evolving relationships are illuminated, revealing the ethical dimensions of coexistence and the complexities of interspecies interdependence. Drawing upon Margaret Atwood's *The MaddAddam Trilogy* and Richard Powers' *The Overstory*, this research underscores the need to reconsider how humans fit into the ecological and ethical network of the natural world. The study begins by examining the historical development of posthuman thought, emphasizing the implications of the Anthropocene, the human exploitation of nature, and the changing relationship between humans and technology. It then traces the evolution of ecocriticism into material ecocriticism, incorporating foundational concepts such as agency, actor-network theory, and agential realism. Building upon this theoretical groundwork, the research investigates posthuman ethics,

through the works of Donna Haraway and Rosi Braidotti, with particular emphasis on multispecies living, mutual becoming and collective responsibility. The analysis of *The Maddaddam Trilogy* focuses on themes such as bioengineering, narrative agency, and spiritual development among posthuman species, while the discussion of *The Overstory* centers on vegetal agency, environmental activism, and the narrative agency of trees. Ultimately, the dissertation synthesizes these findings to argue that posthuman ethics—grounded in relationality, respect, cooperation, and mutual responsibility—offers a crucial framework for envisioning a more sustainable and harmonious future in an interconnected world.

Keywords: Anthropocene, Posthumanism, Agency, Ecological Crisis, Multispecies Living

ÖZET

Doktora Tezi

Antroposen Çağında İnsanlığı Yeniden Düşünmek: Margaret Atwood'un

***DelliAddem Üçlemesi* ve Richard Powers'ın *Her Şeyin Hikayesi* Üzerine**

Posthümanist Bir İnceleme

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Amerikan Kültürü ve Edebiyatı Programı

Posthumanizm perspektifinden yapılan bu inceleme, çağdaş edebiyatı ele alarak, Antroposen Çağı'nda insan ve insan dışı varlıklar arasındaki dinamik etkileşimi kapsamlı bir biçimde incelemektedir. İnsan ve insan dışı eyleycilik, çoktürlü yaşam, anlatı ve posthuman etik gibi temel kavramlara odaklan analiz, geleneksel antroposen senaryolara eleştirel bir yaklaşım sunar. Bu bağlamda, eyleyciliğin yalnızca insana özgü bir özellik olarak kabul edilmesinin ötesine geçerek, bitkiler, hayvanlar ve teknoloji gibi insan dışı aktörlerin de dünyayı aktif bir şekilde şekillendirip etkilediğini gözler önüne sermektedir. Seçilen edebi eserlerdeki anlatılar, bu dönüşen ilişkileri aydınlatan güçlü bir araç olarak işlev görmektedir, birlikte varoluşun etik boyutlarını ve türler arası bağımlılığın karmaşık yapısını açığa çıkarmaktadır. Margaret Atwood'un *DelliAddem Üçlemesi* ve Richard Powers'ın *Her Şeyin Hikayesi* eserlerinden yararlanarak yapılan bu araştırma, insanın doğayla kurduğu ekolojik ve etik ilişkiler ağındaki yerini yeniden düşünmenin önemini vurgulamaktadır. Bu çalışma, posthuman düşüncenin tarihsel gelişimini ve Antroposen' in etkilerini ele alarak başlamaktadır. Doğanın insan eliyle sömürülmesi ve insan-teknoloji ilişkisindeki dönüşüm, bu bağlamda değerlendirilmektedir. Sonrasında, ekoeleştirisinin evrimi ve materyalist ekoeleştiri yaklaşımları incelenerek, eyleycilik ve aktör-ağ teorisi gibi önemli kuramsal kavramlar açıklanmaktadır. Çalışmanın ilerleyen bölümlerinde, Donna Haraway ve Rosi Braidotti'nin posthuman etik kuramları

aracılığıyla çokt rl  yařam, karřılıklı oluř ve etik sorumluluk  zerine iliřkileri irdelenmektedir. Ayrıca, biyom hendislik, insan dıřı eyleycilik ve  evre aktivizmi konuları da analiz edilmektedir. Sonu  olarak, bu arařtırma, posthuman etik anlayıřının –saygı, iř birlięi ve karřılıklı sorumluluk temellerine dayalı olarak– giderek daha da i  i  ge miř hale gelen d nyamızda s rd r lebilir ve uyumlu bir geleceęi inřa etmek i in temel bir kuramsal Zemin sunduęunu ileri s rmektedir.

Anahtar Kelimeler: Antroposen, Posth manizm, Eyleycilik, Ekolojik Kriz,  ok T rl  Yařam



**RETHINKING HUMANITY IN THE ANTHROPOCENE: A
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CONTENTS

THESIS APPROVAL PAGE	ii
DECLARATION	iii
ABSTRACT	iv
ÖZET	vi
CONTENTS	viii
LIST OF FIGURES	xiii
INTRODUCTION	1

CHAPTER ONE

EXPLORING THE POSTHUMAN CONDITION AND ITS ORIGINS

1.1. THE EMERGENCE OF THE POSTHUMAN CONDITION	6
1.2. HISTORICAL DEVELOPMENT	17

CHAPTER TWO

POSTHUMAN BODY AND MATERIAL ECOCRITICISM

2.1. TECHNOLOGICAL EMBODIMENT AND THE POSTHUMAN BODY	26
2.2. RETHINKING IDENTITY: INFORMATIONAL PATTERN, CONSCIOUSNESS, AND PROSTHESIS	28
2.3. CRITIQUE OF HUMAN EXCEPTIONALISM AND SPECIESISM	30
2.4. THE SHIFT FROM POSTHUMAN ECOCRITICISM TO MATERIAL ECOCRITICISM	34
2.5. PLANETARY ETHICS AND INTERDEPENDENCE	37
2.6. THE BODY RECONFIGURED	38

CHAPTER THREE
POSTHUMAN AGENCY: RELATIONAL NETWORKS AND NON-HUMAN
ACTANTS

3.1. INTRA-ACTION AND AGENCY	39
3.2. TRANSCORPOREALITY	41
3.3. SEMIOTIC ACTORS AND MULTISPECIES KINSHIP	42
3.4. ACTOR NETWORK THEORY	45
3.5. RETHINKING AGENCY BEYOND THE HUMAN	48

CHAPTER FOUR
NARRATIVE AGENCY AND ENVIRONMENTAL DISCOURSE

4.1. MATTER AS NARRATOR	50
4.2. ABIOTIC NARRATIVES AND TECHNO-MATERIAL STORIES	52
4.3. POSTHUMAN KINSHIP AND NARRATIVE ETHICS	53
4.4. NONHUMAN VITALITY AND THE FUTURE OF NARRATIVE	54

CHAPTER FIVE
POSTHUMAN ETHICS AND MULTISPECIES LIVING IN HARMONY

5.1. STAYING WITH THE TROUBLE: ETHICS IN TIMES OF CRISIS	56
5.1.1. Reframing Environmental Action: From Resolution to Responsibility	56
5.1.2. Mutual Becoming and the Ethics of Coexistence	57
5.1.3. Tentacular Thinking in Practice	58
5.1.4. Sympoiesis and Symbiogenesis	60
5.1.5. The Impact of Haraway's Theories on Posthuman Ethics	62
5.2. ROSI BRAIDOTTI: POSTHUMAN SUBJECTIVITY AND ETHICAL COEXISTENCE	62
5.2.1. Ethical Responsibility in an Interconnected World	63
5.2.2. Reimagining the Humanities in the Posthuman Condition	64
5.2.3. Memory, Non-Linearity, and Environmental Justice	65

5.2.4. Collective Ethics and Multispecies Responsibility	66
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CHAPTER SIX

ANALYSIS OF THE MADDADDAM TRILOGY

6.1. BIO ENGINEERING AND EMERGENCE OF NEW SPECIES	72
6.2. RELIGIOUS PERSPECTIVES ON THE POSTHUMAN	82
6.3. CHALLENGING HUMAN-CENTERED STORYTELLING: NON-HUMAN AGENCY	87
6.3.1. The Virus as Semiotic Actor and Ecological Agent	89
6.3.2. The Rise of a Posthuman Narrative Voice	91

CHAPTER SEVEN

ANALYSIS OF THE OVERSTORY

7.1. NON-HUMAN AGENCY: PLANT AGENCY	100
7.2. NON-HUMAN NARRATION AND STORYTELLING	103
7.3. MUTUAL BECOMING AND MAKING KIN	106
7.4. ETHICS AND ACTIVISM	109
CONCLUSION	112
REFERENCES	119

ABBREVIATIONS

CO₂	Carbon Dioxide
IPCC	The Intergovernmental Panel on Climate Change
°C	Celsius
PPM	Parts per million



LIST OF FIGURES

Figure 1: The Change in the Human Endeavor between 1750-2000.	p. 10
Figure 2: CO ₂ Emissions Rates Due to Fossil Fuel Usage	p. 11
Figure 3: Trends in Atmospheric CO ₂ vs. Global Temperature Alterations	p. 12
Figure 4: Cary Wolfe's "Fourfold Disciplinary"	p. 31



INTRODUCTION

Posthumanism is an emerging field of inquiry that challenges the anthropocentric paradigms of conventional humanist visions. In recent decades, the posthuman condition has become a critical framework for re-evaluating humanity's position within the world and its connection with the non-human domain. This dissertation investigates posthumanism in literature by focusing on two pivotal works: *The MaddAddam Trilogy* by Margaret Atwood and *The Overstory* by Richard Powers. These literary texts provide an excellent foundation for analyzing human interactions with, influences on, and interdependencies with the natural world, ultimately contesting conventional binaries between human and non-human entities. This research conducts a comprehensive literary analysis of how posthumanism interrogates the human subject, providing insights into ecological, ethical, and material frameworks for comprehending human life in and after the Anthropocene. Climate fiction, as an emerging literary genre, serves as a potent site for articulating these entanglements, inviting critical engagement with planetary approaches to sustainability and non-human agency. Within this context, literature emerges not only a powerful site of ecological thinking—a medium through which posthuman futures, multispecies entanglements, and new ethical configurations can be envisioned.

The theoretical framework of the study draws upon critical posthumanist thinkers including Donna Haraway, Rosi Braidotti, Karen Barad, Katherine Hayles, Bruno Latour, Cary Wolfe, Serpil Oppermann, and Serenella Iovino. Posthuman ethics, agential realism, actor-network theory, and material ecocriticism offer the conceptual tools for examining how literature reimagines the human, the non-human, and the entangled relations that bind them.

The first chapter explores the intellectual background of posthumanism, focusing on the Anthropocene's implications and the philosophical shift from human exceptionalism to multispecies interdependence. The chapter starts off by introducing the origins and evolution of posthuman thought, embarking on the ramifications of the Anthropocene. It examines the evolving interactions among people, nature, and technology, highlighting the repercussions of humanity's exploitation and consumption of the elements of the environment. It further analyzes several

descriptions of the posthuman condition, addressing significant critiques of humanism, including its intrinsic speciesism. It contends that posthumanism contests these conventional frameworks, advocating for a more inclusive and cohesive perspective on existence that surpasses anthropocentric narratives.

The second chapter moves the focus to the posthuman body and materialism, exploring the interplay between technology and the body, biotechnological modifications, speciesism, and material ecocriticism. Drawing on Donna Haraway's cyborg theory, Katherine Hayles' cybernetics, and Cary Wolfe's critique of human exceptionalism, this chapter reconceptualizes the body as a permeable, dynamic interface between the organic and mechanical.

The third chapter addresses the concept of agency, focusing on both human and non-human agents. Incorporating Bruno Latour's "Actor-Network Theory", Barad's "Intra-action" and "Agential Realism", and Haraway's "Semiotic Actors", this chapter redefines agency as distributed, relational, and embodied across multiple species, objects, and systems.

The fourth chapter, "Narrative Agency and Environmental Discourse," broadens the concept of agency within the narrative context. The works of Iovino and Oppermann are used to demonstrate how matter can convey and generate narratives. Terms such as "storied matter" and "narrative agency" are used to examine how non-human entities—such as trees, viruses, and natural elements—function as narrators in climate fiction, therefore relocating the locus of narrative power away from humanity.

Examining Donna Haraway's and Rosi Braidotti's seminal works, Chapter Five delves into the moral consequences of posthumanism and multispecies living. This chapter integrates Haraway's ideas of "staying with the trouble," "making kin," "mutual becoming," "tentacular thinking," and "sympoiesis," with Braidotti's theory of posthuman ethics. The concept of mutual responsibility and the interdependency of species is examined, emphasizing how posthuman ethics reconfigures human relationships with the non-human world. Through expanding these theoretical frameworks, the chapter demonstrates how a posthuman ethical framework suggests a more accountable and interdependent way of coexisting with the natural elements.

A posthumanist analysis of Atwood's *The MaddAddam Trilogy* is presented in Chapter Six. The emphasis of this analysis is on bioengineering, the appearance of new

species, and religious views on the posthuman. Examining the ways in which these themes interact with inquiries into non-human agency, the study delves into the ways in which matter shapes the trilogy's storytelling. In this context, matter refers to material entities-such as genetically engineered bodies, viruses, animals, and natural environments- that not only exist in the narrative's backdrop but also actively participate in it. Utilizing principles from material ecocriticism and agential realism, namely Iovino and Oppermann's concept of "storied matter" and Barad's idea of matter as an "agent", the chapter examines these phenomena as possessing narrative agency. They construct meaning, influence personalities, and facilitate the progression of events, acting as co-authors of the posthuman realm envisioned by Atwood. The chapter further investigates the implications of genetic engineering, and the ethical dilemmas associated with creating new life forms in a posthuman context, particularly as the characters navigate the consequences of Crake's interventions. The transition from human-centered narration to Craker Blackbeard's perspective exemplifies the emergence of a posthuman narrative voice and collective memory. This chapter explores the ethical implications of Crake's bioengineering initiative via the perspectives of Haraway's "making kin," Braidotti's "posthuman ethics," and Barad's "Agential Realism". The Crakers, while intended as passive beings, develop symbolic thought, narrative agency, and ultimately spiritual and ethical consciousness, exemplifying dispersed agency among biological and artificial things. The virus also functions as a non-human actor under Latour's "Actor-Network Theory", altering the surroundings and narrative. The chapter examines Toby and Blackbeard's storytelling as a site of reciprocal development and narrative co-creation across species, aligning with Iovino and Oppermann's notion of "storied matter."

A similar analysis of Powers' *The Overstory* is presented in Chapter Seven, with an emphasis on the narrative function of trees, non-human agency, plant agency, and the narrative possibilities of trees. Powers' work illustrates narrative substance by positioning trees not only as background components but as active narrators, thus connecting with material ecocriticism's need to acknowledge the vitality of non-human voices and their role in meaning-making. This chapter explores how trees embody and convey memory, trauma, and resistance throughout their lifespans, using Iovino and Oppermann's notion of narrative agency and "storied matter." Every human

character undergoes transformation via their interaction with vegetal life, implying Haraway's concept of "becoming-with" and Braidotti's relational ethics. Powers creates a multispecies narrative whereby trees are not just observers but co-authors of ecological history. The novel's non-linear, multi-perspectival structure reflects the interconnectedness of forest ecologies, implying a posthuman philosophy of entanglement. It also discusses the ethical dimensions of environmental activism and the need for interspecies cooperation, illustrating how the novel presents a vision of a future where humans learn to live in greater collaboration with nature.

The final chapter presents the last remarks on the literary study, elaborating on the main points of the study and comparing and contrasting the posthumanist approaches in *The MaddAddam Trilogy* and *The Overstory*. Synthesizing the insights from both literary works, and evaluating how each text employs posthumanist theory, this section invites the readers to reevaluate sustainability initiatives and consider the role of ecological ethics in determining our future, all while considering the possibility of a world in which all living things might live in peace with one another. Instead of providing a dystopian closure, the literary works propose relational techniques for multispecies survival, ecological ethics, and the reconstruction of human-nonhuman connections. With this optimistic view, humans can see how posthumanist ethics might lead the way to a better, more sustainable future, one in which people take personal responsibility for their actions and work together for the common good.

This study is guided by the central research question: How do Margaret Atwood's *The MaddAddam Trilogy* and Richard Powers' *The Overstory* engage with posthumanist frameworks to critique anthropocentrism and reimagine humanity's role through the lens of climate fiction? Advocates for an inclusive worldview that challenges human exceptionalism, promoting a shared commitment to sustainability and cooperation in the Anthropocene, this study calls for a reassessment of humanity's role in the Anthropocene, grounded in posthumanism and contemporary climate fiction. Through its interdisciplinary engagement with literature, theory, and environmental discourse, this study underscores the significance of rethinking human-nonhuman relations in the Anthropocene and positions storytelling as a key agent in shaping collective ecological futures. This research has been completed with the

support of the TÜBİTAK 2211-A Doctoral Scholarship, and I would like to express my gratitude to TÜBİTAK for their financial support throughout this process.



CHAPTER ONE

EXPLORING THE POSTHUMAN CONDITION AND ITS ORIGINS

1.1. THE EMERGENCE OF THE POSTHUMAN CONDITION

Over the course of history, humans have depended on their own inventions and technology to adapt and survive. The evolution of human existence has been consistently influenced by inventions, ranging from the utilization of primitive weapons by prehistoric humans to the emergence of digital technologies in the modern era. This dynamic situation has persistently redefined human capabilities and the fundamental concept of humanity. As time passes, this profound connection with technology has blurred the boundaries between humanity and technology. Humans have never existed in isolation from technology. The invention of the wheel, the printing press, computers, and the internet are more than tools; they serve as extensions of human mind power. In other words, they have evolved in conjunction with their creations. constant and deepening relationship with technological advancements has always shaped them beyond the traditional understanding of humanity, meaning that they “have always been somewhat posthuman in any case” (Braidotti, 2013: 1). Here, it would be wise to view Donna Haraway’s (1991) claim “we are all cyborgs” as referring to the co-evolution of humans with non-human elements. Humans have always been entwined with non-human elements, whether genetic, chemical, or virtual aspects.

Posthumanism emerged as a theoretical framework to reevaluate the essence of humanity in the late 20th and early 21st centuries, during a period characterized by rapid progress in technology that positioned technology at the core of daily existence. Anthropocene is “the current epoch in which humans and our societies have become a global geophysical force” (Steffen et al., 2007: 614). In the 21st century, posthuman theory has become a guiding light for the humanities, particularly challenging anthropocentric assumptions as it re-evaluates what it means to be human in an era of dominant technology that increasingly dominates everyday life.

Posthuman concepts' emergence during a time marked by global crises such as air pollution, climate change, and the extinction of human and nonhuman species is no coincidence. From a historical perspective, posthumanism can be seen as a response to "the Anthropocene", the geological epoch defined by "humanity's profound impact on the planet's ecological systems" (Crutzen & Stoermer, 2000: 17). The Anthropocene reflects the disastrous effects of human activities on the environment, whereas posthuman thought examines Anthropocentric ideas and ideals that have historically influenced humanity's interaction with other species and the natural world. This criticism underscores the relationship between the humanist tradition, which posits man as "the measure of all things," and the subjugation and exploitation of nature, often facilitated by the misapplication of science and technology. Rosi Braidotti concisely characterizes posthumanism as "a crucial aspect of our historicity," highlighting its significance in reevaluating humanity's position within the expansive ecological and planetary setting (2013: 3).

To understand the origins of the Anthropocene, it is crucial to start with its historical development. Researchers began to observe a change in the Holocene era, when human activities started to have a noteworthy impact on natural life. As humans occupied previously uninhabited areas and built cities on a massive scale, the Earth in this era was characterized by G. P. Marsh's description: "the Earth as modified by human action" (quoted in Crutzen, 2000: 17). Not only did this development hasten the increase in the world's population, but it also made the loss of natural resources more severe. Deforestation and excessive usage of fossil fuels are only two examples of how human actions have gradually damaged ecosystems and the atmosphere beyond repair. Paul J. Crutzen, a Nobel Prize winner in chemistry, and Eugene F. Stoermer, a marine scientist, gave name to the era as the "Anthropocene" to highlight the human impact on the natural environment. They explained as followed:

Considering the major and still growing impacts of human activities on Earth and atmosphere, and at all, including global, scales, it seems to us more than appropriate to emphasize the central role of mankind in geology and ecology by proposing to use the term 'Anthropocene' for the current geological epoch. (Crutzen & Stoermer, 2000: 17)

The general opinion across scholars has long held that the steam engine's invention in 1784 and the subsequent Industrial Revolution marked the beginning of the Anthropocene around 1800 (Steffen et al., 2007: 614). Atmospheric changes, such

as the buildup of greenhouse gases, were a turning point of this era's fast industrialization and humanity's dependence on fossil fuels. Fundamental reasons behind global change could be listed as follows: "human-driven alterations of biological fabric of the Earth; the stocks and flows of major elements in the planetary machinery such as nitrogen, carbon, phosphorus, and silicon; and the energy balance at the Earth's surface" (614). With the term Anthropocene, it is indicated that, in the future the Earth we have will become much warmer, less vegetated, and less ecologically varied than the Earth we know.

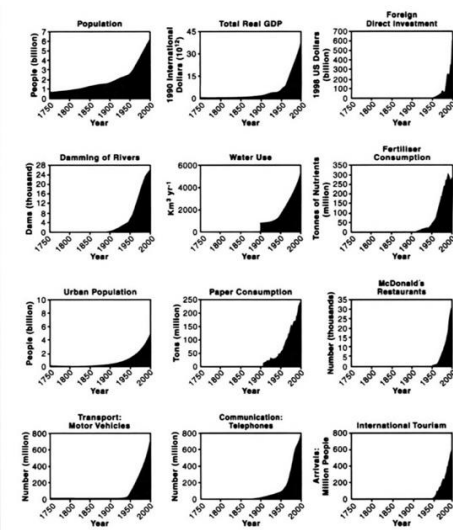
It was widely thought that pre-agrarian societies coexisted peacefully with their environment, since they lacked social and technical skills to fight with or control the immense natural forces. For our predecessors, the turning point came when they mastered fire. Mastery of fire equipped humans "with a powerful monopolistic tool unavailable to other species" and started to change the situation radically for them (614). The use of fire served to deter dangerous animals from human habitats, while hunting became significant in providing an abundant protein nutrition, leading to upgraded cognitive and physical strength in humans. Furthermore, the use of fire fostered the advancement of stone crafting and instrument of warfare manufacturing. The initial negative effects of human activities on the environment can be traced back to the last ice age (614). Human migration to new areas, prompted by the depletion of large animals from excessive hunts, resulted in significant landscape alterations through the establishment of green spaces for plant gathering. The expansion of movement and habitat played a crucial role in the extinction of various large animal species. In the early to mid-Holocene, the cultivation of plants represented a significant transition, leading to the development of agricultural processes. Forests were initially cleared through the use of fire, and with the advancement of these practices, watering systems were implemented to improve agricultural productivity (615).

An article written by Will Steffen, Paul J. Crutzen, and John McNeil (2007) titled "The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?" presents the steps that lead to the Anthropocene. The first phase of the Anthropocene is regarded as "the Industrial Era (ca. 1800-1945)" (616). With the population growth and expansion of fossil fuels, problems started to emerge. The need for energy supplies increased gradually. The founding of the steam engine in the 1770s

“opened an era of far looser constraints upon energy” (616). This required an immediate switch to a high energy civilization. The development and proliferation of these energy systems are directly linked to human activity on the planet, and “atmospheric CO₂ concentration can be used as a single, simple indicator to track the progression of the Anthropocene, to define its stages quantitatively, and to compare the human imprint on the Earth System with natural variability” (616). “During the course of stage one of the Anthropocene from the 1850s to 1945, the CO₂ concentration rose by about 22 ppm”, giving for the first time clear evidence that humans were seriously affecting the ecosystem. This information highlights the undeniable relationship between the emergence of the Anthropocene and the Industrial period.

The years 1945-2015, spanning the conclusion of the Second World War, constituted the second phase of the Anthropocene, which is named as the Great Acceleration (617). After the wars, the world’s population exploded, and countries’ economies grew. The rapid growth of urban life coincided with increasing demand for gas consumption. Human mobilities accelerated dramatically, and people became more interdependent due to travelling, science and technology. A dramatic increase in atmospheric greenhouse gases, caused by this change, is responsible for the quick rise in Earth’s surface heat. In addition to these effects, industry saw tremendous growth, cities replaced rural regions causing human habitat and cultural changes. In short, we can say that post-war period was an era of transformation as we can view all aspects of the human endeavor in the figure below.

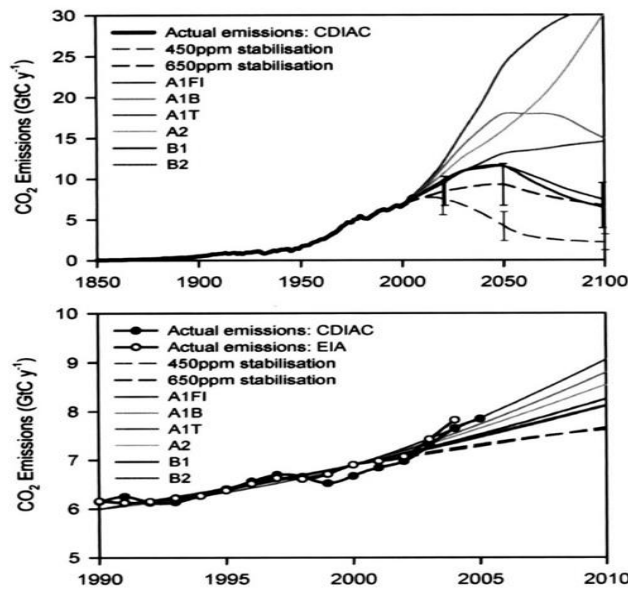
Figure 1: The Change in the Human Endeavor between 1750-2000.



(Steffen et al., 2007: 617).

The third phase of the Anthropocene is believed to start around 2015 (618). It was the period of concerns due to the understanding of humans of the changing environment. Concerns regarding environmental issues increased markedly post-1960s, with temperature data by the 1980s substantiating the existence of global warming. Recent scientific advancements, the significant impact of the internet as a cohesive global network, the proliferation of independent media, and the expansion of democratic political systems have led individuals to reconsider their actions. Critics have noted that humanity has evolved into “a self-conscious, active agent in the operation of its own life support system” (Steffen et al., 2007: 619).

Figure 2: CO₂ Emissions Rates Due to Fossil Fuel Usage

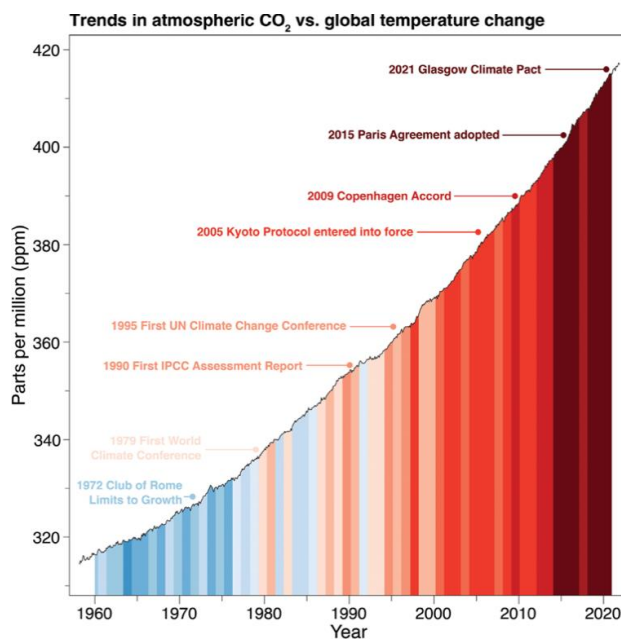


(Steffen et al., 2007: 620).

Figure 2 presents historical data and future projections of global carbon dioxide (CO₂) emissions. The data illustrate the natural process of carbon emissions driven by fossil fuel consumption. A significant rise in emissions is observed after the year 2000. Historically, there has been a steady increase in CO₂ emissions and is expected to reach high levels if current trends continue. Various emission scenarios highlight the potential influence of human activities and climate policies on future emissions. Without the implementation of more stringent carbon reduction policies, mitigating global temperature rise will be highly difficult. Despite the apparent increase in CO₂ emissions and anticipated repercussions, it was commonly believed that global change was a remote issue, thereby diminishing the perceived urgency for preventive actions. Instead of collaborating on long-term strategies for global change mitigation, resources were directed towards pressing human necessities, including healthcare and education. Moreover, there existed a wrong assumption that economic systems had adequate financial and capacity to effectively address and reverse the detrimental impacts of global change as required. This idea fostered recklessness, leading to delayed actions when timely interventions were crucial.

Huge shifts in temperatures characterize the 20th and 21st century. “The Intergovernmental Panel on Climate Change” predicts that by 2100, “world temperatures will have risen between 1.4 and 5.8 °C, and that sea levels will have risen between 20 and 88 cm” (Maslin, 2023: 1). During the period known as “the Anthropocene”, human activity has had a significant and, in many instances, permanent impact on Earth’s natural environment and geology. Over centuries, human activities have continually reshaped the environment, leading to outcomes far beyond simple climate alterations—culminating in a “potential systemic collapse” (Glottfelty, 1996). By considering human history via a planetary lens, the Anthropocene expands upon Dipesh Chakrabarty’s seminal book, *The Climate of History*. Although discussions over the ecological footprint of humans have raged on for ages, the Anthropocene era highlights the fact that contemporary human actions are taking over and reshaping Earth’s natural processes. Overconsumption of fossil fuels, which increases “atmospheric concentrations of carbon dioxide and other greenhouse gases” and accelerates “the rate of climate change”, provides a more concrete illustration of this point (Trenberth, 2018).

Figure 3: Trends in Atmospheric CO₂ vs. Global Temperature Alterations



(Maslin et al., 2023: 14).

Figure 3 data shows that atmospheric CO₂ temperature has been rising steadily and quickly since 1960s. From the middle of the twentieth century forward, this growth has accelerated significantly. Human activities are clearly troubling ecological equilibrium, as seen by the levels of CO₂ in the air. Among the first severe warnings about the danger of surpassing environmental constraints was the 1972 “Limits to Growth Report” released by the Club of Rome. The subsequent events, including the first “United Nations Climate Change Conference” in 1995 and the first “IPCC Assessment Report” in 1990, sought to provide scientific evidence of the harm that humans had inflicted upon the ecosystem. Nevertheless, the rise in CO₂ emissions has persisted for years despite these cautions, and little tangible political action has been taken to address the issue. The international efforts like “The Kyoto Protocol” (2005), “The Paris Agreement” (2015), and “The Glasgow Climate Pact” (2021) tried to slow the rise of CO₂ in the atmosphere. The figure, however, indicates that the rise in CO₂ levels persists even after these global policies are put into practice. The global community has been slow to act against environmental catastrophes, and the remedies put forward by policymakers so far have been insufficient. Finding long-lasting solutions to ecological problems is central to Donna Haraway’s (2016) “staying with the trouble” concept. As this figure shows, the view of the intertwined system of human and nonhuman elements is essential, and current crises cannot be resolved or postponed with simple solutions. The figure hints at the message that a more holistic and long-term strategy is required to address environmental challenges, rather than relying just on policies and technology. In order to make sense of the present worldwide environmental catastrophe, it is vital to look at the evolution of the Anthropocene and the scientific explanations for the crisis. To address the challenges of the era, we need to shift our perspectives to a broader one, adopting a new and inclusive perspective within the framework proposed by Donna Haraway.

There has been a noticeable blurring of lines between human and non-human beings in the twenty-first century. Considering technological advancements, ecological problems, and societal shifts, the constraints of anthropocentric philosophy are scrutinized, and alternative ontologies are suggested by critics. In this context, the new ontology posits that entities exist in a relational and intertwined fashion, rather than as autonomous and permanent essences. Nicolai Hartmann’s “new ontology”

claims that beings possess a structure with multiple layers. According to Hartmann, ontology is “an analysis of the real world aimed at disclosing its levels and their constituent categories, together with the laws governing the numerous interrelationships involved” (Smith, 1954: 588). This approach seeks to examine elements in a hierarchical structure while also comprehending their interconnectedness.

At the center of Hartmann’s new ontology “is that the real world of concrete things is structured through levels and spheres [...] each of which contains specific categories related to each other by definite laws” (589). This would demonstrate that every level of being is actually interdependent while maintaining a degree of relative independence from both lower and higher levels. It is also stated that the relationships between these layers constitute the “real unity of the world” and “categorical laws replace the all-encompassing world unities of monist metaphysics as the true model of the unity of the real world” (589). This viewpoint challenges the boundaries of conventional anthropocentric ontologies and establishes a basis for understanding the co-transformation of beings. Hartmann’s approach approves the idea of unity among diverse beings and transcends the limits of typical anthropocentric perspectives.

In the context of this dissertation, the coexistence of human and nonhuman elements is explored as a foundational aspect of understanding our mutual existence in the world. This interconnection goes beyond a mere acknowledgment of coexistence and puts into light the ways in which humans and nonhumans influence and shape each other. The responsibilities arising from these entanglements and the possible ways of living in harmony are examined. The responsibilities that arise from these entanglements are a significant component of this investigation because they necessitate a rethinking of established hierarchies and dualisms that have long divided the human from the nonhuman. This exploration also analyzes alternative methods of living in peace, with a focus on practices and ideologies that promote cohabitation, respect for one another, and caring. By investigating these intersections, this dissertation hopes to add to the continuing discussion of how humans might better comprehend their role in a “more-than-human world” as they engage in establishing sustainable and fair futures. This study seeks to address the following questions: What is the nature of the relationship between human and nonhuman entities? Do entities

exist independently, or are they part of a relational network? In what manner should humans articulate their evolving role on Earth?

Posthumanism contests the perception of nature as a resource to be dominated by humanity, subservient to its will and only dedicated to sustaining human existence. According to Posthumanism, regarding the human as the central figure in value systems. Starting with the humanist ideologies, “which human?” question is a problematic one, since it mostly gives credit to a specific group of humans and ignores “the others” either other inferior groups of people or nonhuman elements. This worldview posits that humans and technology are not the focal points of life; rather, humanity must learn how to use technology as a partner in progress without abusing the natural world.

Posthumanism points out the coexistence and transformation together of all human and nonhuman elements. As Katherine Hayles (1999) explains, the posthuman concept calls for an end to the exclusion of specific groups and entities. It repositions humans as just one element of the world rather than a privileged category: “we are a part of that nature that we seek to understand” (Barad, 2007: 26).

While the scientific understanding of temperature rise has its roots in the work of Svante Arrhenius in the 1890s, societal debates on the topic did not commence until the late 1980s (Chakrabarty, 2009: 198). Moreover, it had not been considered a problem until the 2000s, when the indicators of the issue became significant. The problems were too big and effective that people could no more ignore:

[...] such as the drought in Australia, frequent cyclones and brush fires, crop failures in many parts of the world, the melting of Himalayan and other mountain glaciers and of the polar ice caps, and the increasing acidity of the seas and the damage to the food chain. (198)

Dipesh Chakrabarty argues that the Anthropocene, the new geological period in which people have become a “geological force”, questions the very foundation of conventional human centered histories of contemporary global society. While aiming human equality and emancipation, intellectuals from the Enlightenment failed in considering humanity’s increasing influence as a force. It is said that ever since the Industrial Revolution, humans have greatly utilized fossil fuels, which, in return, have aligned humans’ present-day freedoms with environmental consequences. The Anthropocene is not efficient about allowing one to make a line that separates human

history from natural history because of this immense influence of human activity on Earth's geology and ecosystem (211). As a result, future responses to climate change may need a delicate balance of logic and politics, which are complicated. Climate scientists and intellectuals are now looking for global policies to address these results, but the Anthropocene raises concerns about our present political institutions' ability to well manage these long-term environmental situations (212).

Traditionally, human history has concentrated on themes of freedom and growth within human civilizations. However, with humans now accepted as a geological force, we must analyze our species' deeper history and its influence on global circumstances. This entails considering both documented human history and "deep history" - humanity's long-term biological and evolutionary environment (213). The "Anthropocene" concept compels us to connect economic critiques with "species thinking" concerning the long-term existence of humanity in Earth's ecosystems in ways hitherto little considered (213). Combining these principles calls into question traditional knowledge, as humanity must reconcile capitalism's past with its role as a biological agency.

Chakrabarty investigates the notion of "species history" and its limitations within standard historical frameworks (2009: 219-220). He argues that thinking humankind as "species" is confusing for the ones looking from traditional historical perspective, which is mainly built on human experiences. Since humans cannot totally experience being a "species" or regard themselves as a geological force, they will only see the climate crisis as a shared danger instead of a shared human identity. Chakrabarty describes this as a "negative universal history" where humans encounter a collective threat without embracing it with a collective sense of identity (222).

1.2. HISTORICAL DEVELOPMENT

The roots of posthumanism may be traced back to criticisms of conventional humanism, which prioritized the significance of humans in comprehending the universe. Ihab Hassan (1977) who was recognized for the promotion of postmodernism in the field of literature, has been frequently acknowledged for coining the term “posthuman” in his article named “Prometheus as Performer: Towards a Posthumanist Culture?”. In his work, he articulates a vision of posthuman that refuses the tenets of Western humanism, underscoring the necessity for a comprehension of one’s identity that surpasses human singularity. This work establishes a foundational base for later theorists to investigate the effects of technology and popular culture on individuality.

Ihab Hassan states that posthumanist process relies on the growing influence of “the human mind on nature and history, on the dematerialization of life and the conceptualization of existence” (835). Contrary to Hegel’s idea of awaiting the end of history, “the synthesis of (opposites like) the Concrete and the Universal, Slave and Master, or Individual and State” already unfolds through human capacities for “Dream, Hope, and Language” (835). With regard to Jacques Monod’s viewpoint, Hassan emphasizes humanity’s exceptional status as the most “distinctive” and “self-transcendent” creature, capable of “abstraction” through language and rising levels of awareness, always redefining itself and its comprehension of life (835).

Hassan further emphasizes humanity’s dependency on tools and technology by giving Prometheus myth as a significant example: “Prometheus [...] being at a loss to provide any means of salvation for man, stole from Hephaestus and Athene the gift of skill in the arts together with fire. [...] In this way, man acquired sufficient resources to keep himself alive” (836). Without Prometheus’ act of stealing of fire from the realm of gods in the myth, humanity might not surpass its constraints and keep the race alive. Within the posthumanist framework, Prometheus’ offering symbolizes the dawn of “human self-transcendence” as using fire and the arts for their sake, humans were able to manipulate nature and the course of history (836). Moreover, posthumanism challenges the anthropocentric emphasis of humanism by recognizing the interdependence of human and non-human entities, much like how Prometheus’s activity initiated a transformation in humanity’s connection with nature and spiritual.

Near the end of his writing, he proposes a warning to humanity: “The [...] Earth must be heard, else Consciousness turn the Sky into fire” (848). This warning emphasizes the posthumanist need to acknowledge the Earth’s signals, as humans’ uncontrolled hegemony and actions may inevitably cause disastrous outcomes.

[...] the classical ideal of “Man”, formulated first by Protagoras as the “measure of all things”, later renewed in the Italian Renaissance as a universal model and represented in Leonardo da Vinci’s Vitruvian Man. [A set of mental, discursive and spiritual values] uphold a specific view of what is “human” about humanity. (Braidotti, 2013: 13)

This was the rationale behind European politics throughout the 18th and 19th century. As a vessel for ideal logic and reason, man is an “intrinsically moral” entity. Having these resources at his fingertips, a man can achieve his full potential and rightfully claim all he comes across as his very own. The question posthumanism wishes to ask is regarding the centrality of man as the primary focus. According to Ihab Hassan (1977), “posthuman does not mean the end of humans as such but the end of the human ideal as perceived by philosophers like Descartes, Thomas More, and Erasmus” (836).

Rosi Braidotti introduces the posthuman as a concept that extends beyond the humanist subject and tackles the interconnection of human and non-human elements: “The posthuman condition introduces a qualitative shift in our thinking about what exactly is the basic unit of common reference for our species, our polity and our relationship to the other inhabitants of this planet” (Braidotti, 2013: 1-2). This change challenges us to think beyond anthropocentric paradigms, reframing the human not as an excluded, unique entity, but as an intertwined, relational being residing with a dynamic network of nonhuman life and matter.

In order to have a deeper understanding of posthumanism, we have to start our research from the beginning of the “ideal of man”. In order to understand in-depth the relevance of the challenge for anthropocentric paradigms that posthumanism performs, it is necessary to look at the historical trajectory humanism gave to the ideal of man during both the Renaissance and the Enlightenment. According to Braidotti, “posthuman theory is a generative tool to help us re-think the basic unit of reference for the human in the bio-genetic age known as ‘anthropocene’, the historical moment when the Human has become a geological force capable of affecting all life on the planet” (2013: 5). Likewise, the anthropocene period is the age during which human

activities lead to the destruction of planetary resources. Posthuman theory urges people to question their own impact on the natural and to take the responsibility of the damage caused. Posthuman theory challenges the enlightenment ideals of man, by celebrating all organisms as having equal importance on the planet. Posthuman theory challenges “the classical ideal of Man” which suggested “the man as the measure of all things”, asserted by the Renaissance and Enlightenment ideas.

Humanism, a current of thought, first emerged in Italy in the 14th century. This current of thought came out in opposition to the scholastic thought of the Middle Ages. It reached its peak in the 15th century with the Renaissance, and until the end of the 16th century, it showed its effects all over the world, especially on the European continent. The Renaissance and the Enlightenment periods marked a significant shift towards reason, experimentation, and observation as the foundation for understanding the world. These intellectual movements challenged the traditional authority of the church and clergy and diminished their dominance ultimately. With the renaissance, the scholastic view, the narrow and unalterable view of the church, was collapsed. It was replaced by positive scientific thinking. Reason was started to be treated apart from religion. During the Middle Ages, human perceptions of nature and the natural world were largely shaped by sacred texts and religious doctrines. This age was distinguished by a dependence on religious teachings and religious books to explain the natural world, which often coincided with hierarchical conceptions such as Aristotle’s “Great Chain of Being”. However, although Aristotle's framework was initially philosophical and not overtly religious, it was eventually absorbed into medieval religious thinking, elevating divine and spiritual beings to the pinnacle of reality. Aristotle’s framework placed God, angels, and spiritual beings at the pinnacle of the hierarchy, reflecting and reinforcing the prevailing view that these entities were sacred and superior to all others. Below them were humans, followed by animals, plants, and finally, inanimate objects at the base of the chain. This hierarchical taxonomy also implied a moral and ethical degradation from the top down, emphasizing the divine's central role in human existence. However, the introduction of Charles Darwin’s idea of evolution reshaped this strict worldview by breaking what was considered an unchangeable bond between the divine and humans. Evolutionary theory provided a scientific explanation for life’s variety, challenging the religious

foundations of the “Great Chain of Being”. As a consequence, humans adopted an anthropocentric viewpoint, prioritizing individuality and independence above divine authority. This transition not only altered humanity's interaction with nature but also stimulated an extensive rethinking of human existence and role in the cosmos.

“The idea of Man as the centre of the universe” was a common feature of Renaissance humanism (Braidotti, 2013: 13). The Renaissance, as an important turning point in humanist thinking, created not only analytical ideals but also widely recognized visual depictions of these concepts, such as “Leonardo Da Vinci’s Vitruvian Man”. His drawing of the human male puts forward the idea that man and nature are connected. He places a human body in an overlapping circle and square. By doing this, he demonstrates the idea that the human body is correctly proportioned. For him, this drawing represents a man standing at the center of the universe with everything else measured from this point (2013: 13-30). It can be said that in his drawing, Da Vinci has used proportions as a way of connecting man and nature. The symbolic relationship of the square and the circle can be analysed from a humanistic definition as Man’s unique position in the universe and his human dignity.

The humanist approach to individuality praised human imagination and intellectual accomplishments, promoting faith in the mind's boundless potential. This viewpoint eventually impacted Enlightenment thinkers, who emphasized reason as the fundamental feature of humans. The humanistic emphasis on human reason and creativity unwittingly fostered the idea that humankind is superior to other life forms, further opening the door to theories like Cartesian dualism.

Cartesian philosophy, which followed humanistic ideals, emphasized the supremacy of reason by theorizing that the mind was the source of all existence, the agent of thinking. This reinforced the separation of humans from the natural world and the intellect from the body. Cartesian philosophy is an opinion arguing that one can reach certain information by using his/her mind, but he/she can criticize the accuracy of this information throughout his/her life. Rene Descartes’ view “I think therefore I am” appreciates human as the discourse producer, which also puts human in front of the ontological (10). The idea that discourse is produced, and culture is shaped by humans, leads to the misunderstanding that culture is in a higher position than the natural (Ağın, 2020).

According to the values advocated by this movement, the aim of literature is to glorify people. In humanist point of view there was a settled definition of “what is human” and the ones who did not fit in this definition were outcasted. Humanism was the period of freedom, justice, development, and breaking chains from religious limitations and reasoning. However, human/Anthropos defined in humanism was “white”, “Western”, “powerful”, and “a speaker of one of European languages”. Whoever did not fit in these categories did not belong to the privileges of humanism ideals. Posthumanism is opposing this this casting. According to posthumanists, all beings and organisms, even non-living elements, have rights to be considered as important parts of the ecosystem.

Humanism is a system of thought that puts human at the center of the existence and promotes values such as reason, individualism, and free will. Rooted in the intellectual traditions of Renaissance and Enlightenment, humanism has historically aimed to characterize human beings as independent and rational agents who possess the ability to shape their own futures. Nevertheless, since the early 20th century, this approach has encountered various crises and criticisms, giving rise to a rethinking of its fundamental principles. Humanism has been diminishing owing to its Eurocentric foundation and imperial inclinations. Critical humanism offers a perspective that interrogates the limits of traditional humanism and discriminatory attributes.

An important figure in the development of critical theory, Friedrich Nietzsche denies the very basis of human-centred cognition. Nietzsche’s conceptions of the “death of God” and the “Übermensch” are essential criticisms that connect with modern discourses of critical humanism, especially in light of ecological interactions and the rethinking of human-nonhuman relations. In *The Gay Science* (1882), Nietzsche proclaims that “God is dead”, symbolizing the disintegration of conventional moral and philosophical frameworks that had offered direction and purpose to human existence. By suggesting that humans are not primary judges of right and wrong, this remark contradicts the anthropocentric worldview. He argues that everyone should be responsible for creating their own values and should instead believe that there is no fixed purpose in life. From a critical humanist perspective, this shift urges a reevaluation of humanity’s role in existence, recognizing the limits of human exclusivity and the need for a greater inclusion of multispecies experiences.

Introduced in *Thus Spoke Zarathustra* (1883), the *Übermensch*, often known as the “Overhuman”, calls for the elimination of all human constraints and values. Although conventional understandings of the *Übermensch* place an emphasis on personal strength and overcoming obstacles individually, a humanist critical reading offers the potential to reframe this concept within the context of environmental philosophy. The *Übermensch*, instead of being a solitary, superior being, might be seen as someone who adapts to the changing nonhuman environment by embracing interdependence of all species and peacefully coexisting.

In *The Order of Things* (1970), Michel Foucault posits that the concept of “human” is not a fixed concept but rather than that human beings are subjects shaped by the knowledge systems of a given historical period. He argues that human beings are subjects shaped by discursive formations—frameworks of thought that delineate and govern what can be understood and articulated regarding humanity. Foucault claims that the conception of the human being as the focal point of knowledge and meaning is a historical “invention” that arose concurrently with modernity’s endeavour to group together and regulate the world (387). He asserts that this idea is fundamentally grounded in the “universality” claims of Western philosophy, which aimed to create a coherent and comprehensive understanding of existence through reason and observational evidence. Foucault’s concept of “death of man” delineates an epistemological and ethical problem that transcends opposing viewpoints and permeates many extremes of the ideological scale (Braidoti, 2013: 23). His assertion that the idea of placing humans at the focal point has ended challenges the very premise upon which humanism ideals stands (23). He attributes this transition to developments in scientific thinking, notably in the natural sciences, where the complexity of life itself progressively challenged the mechanical models handed down by traditional Cartesianism. Exploring nature in all its variety became necessary after “it had at last become clear that it was impossible to fit the entire world into the laws of rectilinear movement” and when the complexities of living things could not be contained within relatively easy models of matter. Following the rejection of Cartesian concepts, this sparked a fresh, in-depth investigation of all forms of life (Foucault, 1970). He emphasizes a critical moment in intellectual history when the worldview of Descartes -based on all phenomena could be understood through linear motion- proved

inadequate in the face of the enormous complexity and variety of the natural world. As people started to see the limitations of Cartesian duality became apparent, new modes of observation and classification emerged, emphasizing the unpredictability. Therefore, Foucault's criticism of humanism draws attention to the weaknesses and the risks of human-centered ideas and encourages people to rethink the relationship between humans and non human world. In other words, his criticism is established on challenging the anthropocentric assumptions inherent in traditional Western thought (Carollo, 2022: 68).

Nietzsche established a foundation for transhumanism by rejecting essentialist perspectives on human nature and adopting a dynamic, process-oriented view of existence. By rejecting the assumption of a static human nature, Nietzsche offered credit to the possibility of ongoing metamorphosis and liberation from personal gain. This viewpoint is in line with the transhumanist objective of using technology and augmentation to surpass the constraints that humans now face. The matter of whether transhumanism and Nietzsche are compatible philosophically is a topic of continuing discussion among academics. Although transhumanists and opponents of Nietzsche disagree on whether his rejection of Enlightenment-utilitarian principles is fundamental to the movement, many consider Nietzsche's theories to be basic. (Carollo, 2022: 68)

Braidotti (2013: 30) acknowledges that, despite its many problematic aspects, humanism's individualist nature also serves as a significant practical instrument for advancing social transformation. At the same time, posthumanism offers an alternative angle that moves beyond the crisis of humanism, not by dwelling on its contradictions, but by actively looking for new ways to conceptualize the human subject (37). In this sense, posthumanism does not merely signal the downfall of humanism, rather it actively seeks out and builds upon its heritage while refocusing the conversation on what's really important — the future.

Speciesism is a biased ideology or behavior that puts human interests in front of nonhuman beings' and often justifies mistreatment and exclusion. Rooted in anthropocentric thought, this philosophy has traditionally justified the exploitation of animals and environment by placing humans at the center of life. Since the Middle Ages, hierarchical structures, such as Aristotle's *Scala Naturae*, privileged human

interests over those of nonhuman entities, further solidified by religious doctrines that emphasized the divine superiority of humans over other beings.

This ontological hierarchy has justified myriad marginalization and oppression strategies one of which connects humans with animals and ecosystems. Speciesism enables the destruction of ecosystems and biodiversity because of the privilege of human-defined interests (Braidotti, 2014: 89). Societies built on such an anthropocentric view produce ethical and legal systems that routinely exclude nonhuman species from moral consideration, a form of discrimination that is as insidious as racism or sexism.

As underlined by Başak Ağin (2020), posthumanism advocates for a transition from this hierarchical worldview to “a horizontal or flat ontology”. This alternative Notion emphasizes the interconnectedness and interdependence of all living forms, challenging human-centered perspectives. In addition to challenging humanity’s privileged status, posthumanism critiques the concept of human autonomy. It underlines the profound “entanglement” of humans with other forms of life and calls for acknowledgement of these bonds in shaping ethical and ecological frameworks.

Expanding on this we can review Karen Barad’s concept of “agential realism”, which provides a deep critique of speciesism. This anthropocentric conception of agency that confines it to the prerogative of human entities is in direct contrast to the position of Barad (2007), who argues for conceptualizing agency as an intra-active (dynamic) process across different entities, be they human or nonhuman. In demonstrating how all forms of existence are entangled, this serves to disrupt the hierarchical structures underpinning speciesism that Barad critiques. Her framework highlights the human, nonhuman co-constitution and excludes any understanding of the human as a separate organism.

Human’s species-based prejudices hinder his fully understanding of the profound interconnectedness between humans and nonhuman elements. These biases hinder the recognition that human existence is inextricably dependent on nonhuman entities and that all forms of life on Earth are intertwined. Previously, speciecism was associated with animal studies and mainly focused on the hierarchical distinction between humans and animals. However, as technological advancements increasingly made human and technology inseperable elements, a new relationship emerged-

human-robot relationship. Gradually, this increasing interconnectedness between humans and robots has given rise to complex ethical questions, necessitating the expansion of speciesism to encompass these evolving dynamics. Barad's concept of entanglement is especially relevant here, since it demonstrates the inseparability of humans and technological beings. This viewpoint demands us to reevaluate ethical frameworks that keep prioritizing humans while seeing the robots as just tool that help humans.

According to Charles Darwin's theory of evolution, people are just another element in the chain of life, rather than an inherently better species. With this idea, anthropocentric positions of beings are tested. While the theory contested the humanist perspective rooted in divine origins of hierarchy, it was not efficient to completely eradicate human superiority ideas. Building on this idea, posthumanism advocates for an ethical framework that does not discriminate based on species but rather recognizes the intrinsic value of all entities.

In order to reimagine humanity's place in the natural world and lessen the impact of ideologies that prioritize human life, it is essential to tackle speciesism in the Anthropocene era. Following Karen Barad's ideas, what is required for dismantling speciesism is nothing but a radical change in the way we have so far understood and related to matter. The concept of entanglement allows us to transcend hierarchical differences and acknowledges a set of relations which define the living being. Anthropocentrism is at the heart of speciesism, which divides the natural world and blinds people to our interdependence and reliance on things other than ourselves. By providing an alternative to these prejudices and posthuman theory paves the way for a more harmonious cohabitation with all entities.

CHAPTER TWO

POSTHUMAN BODY AND MATERIAL ECOCRITICISM

2.1. TECHNOLOGICAL EMBODIMENT AND THE POSTHUMAN BODY

Posthumanism places an emphasis on conversations on the intersection of technology and the human body. Infusing posthumanist ideals with more conventional, human-centered ones, the movement promotes a future in which people and technology are one and act together.

As technology evolves, it is no longer merely a tool that helps people lead better lives, it is actively reshaping people's biological and physical limitations in ways like making them disappear altogether, altering them directly via modification, or even generating whole new body types. Integrating cybernetics and robotic technology into the human body, altering people's genetic blueprints, and setting restrictions with medical procedures are all examples of deeper modifications that fall under this category.

In order to have a better understanding of the deep interconnection between technology and humans, advancements in the biotechnology field and the transformation of the body need to be held under a microscope. The essence of posthumanism is in the possibility that biotechnology, via techniques like cloning and genetic engineering, might alter the human body. Examples of progress beyond the limits of the human body include improving our genetic material to boost our biological potential and enhancing our cognitive and physical capabilities via the help of technology. Integrating technology with one's physical form signifies a metamorphosis in one's mental and physical selves. For instance, a new kind of body that combines biological and mechanical components is highlighted by the cyborg notion.

Cybernetic devices integrated with the human body offer the possibility of overcoming the physical limitations of the body and its capacity. Artificial organs, prosthetics, and other biotechnological devices can improve the physical and mental capabilities of humans. Some tangible instances of the connection between technology and the body include bionic eyes, hearing aids and prosthetic limbs.

Donna Haraway's *A Cyborg Manifesto* (1985), plays a pivotal role in advancing posthumanist thought by introducing the concept of the cyborg—a hybrid being that conflated the distinctions between human and machine. According to Haraway, a cyborg is “a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction” (5). She contends that “by the late twentieth century [...] we are all chimeras, theorized and fabricated hybrids of machine and organism- in short, cyborgs” (7).

By stating this, Haraway implies that identities are essentially changeable and influenced by encounters with technology, therefore challenging the traditional divisions between humans and non-humans, as well as between the natural and the manmade. The cyborg serves as both a metaphor and a material reality for a new kind of embodied identity that resists dualistic thinking. Humanist ideals of stable and autonomous self are challenged by Haraway's cyborg image, which also challenges other traditional dualisms like “self/other”, “nature/culture”, and “human/machine”. She argues that identities are not fixed entities but are constituted through interactions with technology and, in so doing, challenges traditional notions of gender and identity (Castree et al., 2004). The integration of the body with technology necessitates a reconfiguration of individuals. The distinction between humanity and technology are more indistinct. This physical cyborg enables humans to view human production is not only a biological but also as a technical process. This idea indicates that the distinctions between humanity and technology are becoming more fluid, and that humans are in a perpetual state of metamorphosis.

Haraway's influential work laid the ground for grasping the fluidity of identity within a technology-mediated context and aligns with posthumanism's critique of anthropocentrism and its celebration of the inseparability of people from both technology and the natural world. Since humanism has always given an advantage to “white, Western, male” subjectivity, Haraway's feminist criticism questions these exclusive principles. Her support for intersectional identities that do not conform to “binary gender, racial, or socioeconomic” categories is in line with posthumanism's need for diversity and inclusion (25). Thus, *A Cyborg Manifesto* (1985) offers a critical perspective on the posthuman condition, emphasizing how “technological and

environmental entanglements” reshape the definition of being human in the modern context.

2.2. RETHINKING IDENTITY: INFORMATIONAL PATTERN, CONSCIOUSNESS, AND PROSTHESIS

Katherine Hayles expands on the ideas of the fluid borders between humans and technology, building on Haraway’s criticism of identity and the human/machine duality. Katherine Hayles (1999: 35), explores the entanglement between biological and technological elements, arguing that the distinction between what is human and what is machine is becoming blurred day by day, “the posthuman implies not only a coupling with intelligent machines but a coupling so intense and multifaceted that it is no longer possible to distinguish meaningfully between the biological organisms and the informational circuits in which the organism is enmeshed”. By systematically presenting the concept of human-machine hybridity within cybernetic and information-based frameworks, Hayles expands upon Haraway’s symbolic cyborg. Just as Haraway’s cyborg concept questions the inflexible duality of self/other, human/machine and culture/nature, Hayles extends this discussion to a more systemic level, arguing that the limits of the human body are being redrawn by the networks and technologies that people build.

According to Hayles, the current view of the mind and body as distinct entities is challenged by cybernetics, which emphasizes feedback mechanisms, information flows, and interconnectedness among systems. Within this paradigm, the technology systems that mediate our encounters with the environment are becoming more and more interwoven with human identity and awareness, expanding their domain beyond biological processes. By integrating Hayles’ theories on cybernetics with Haraway’s vision of hybrid identities, posthuman efforts to blur the lines between humans and non-humans could be explored.

Hayles identifies key assumptions that characterize the posthuman perspective by challenging traditional humanist notions: the first assumption states that “the posthuman view privileges informational pattern over material instantiation” (1999: 2). This means that posthumanism prioritizes the informational systems that govern

the organization and interactions of beings rather than concentrating only on their physical bodies or material structures (1999: 2). For instance, even if it lacks a physical body, an artificial intelligence or digital being can achieve the status of “being” by virtue of the information and communication networks it inhabits. This demonstrates how our knowledge of humans and post-human species is evolving, suggesting that identity and agency may manifest beyond physical existence. The second assumption Hayles outlines is that “the posthuman view considers consciousness, regarded as the seat of human identity in the Western tradition long before Descartes thought he was a mind thinking” (3). This challenges the entrenched belief that humans are the principal agents in nature and redirects attention from the human mind as the core determinant of identity (3). Third, “the posthuman view thinks of the body as the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prostheses becomes a continuation of a process that began before we were born” (3). This perspective also reconceptualizes the body as a flexible and progressive tool rather than a fixed and autonomous one. In that regard, the incorporation of advanced technologies—whether physical prosthesis, wearable device, or digital enhancement—does not represent a radical reversal but a natural extension of those processes that have consistently shaped human life. For instance, technologies like eyeglasses, hearing aids, prosthetic limbs, cochlear implants, and brain-machine interfaces involve the integration of the artifact into the human body and emphasize that the human body is essentially malleable. Such understanding deconstructs the traditional view of the body as a well-defined boundary and further dissolves the distinction between human and machine. Fourth, and perhaps most importantly:

[...] the posthuman view configures human being so that it can be seamlessly articulated with intelligent machines. In the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals (3).

This is a claim fully embodying one of the key tenets of posthumanism, such as the impossibility of sharp borders between a human and technology. According to this, in the posthuman era, conventional boundaries between the biological and the technical, the natural and the artificial, become increasingly invalid.

Advances in the field of artificial intelligence and robotics in the contemporary world have come to develop systems that do not only emulate human talents but also

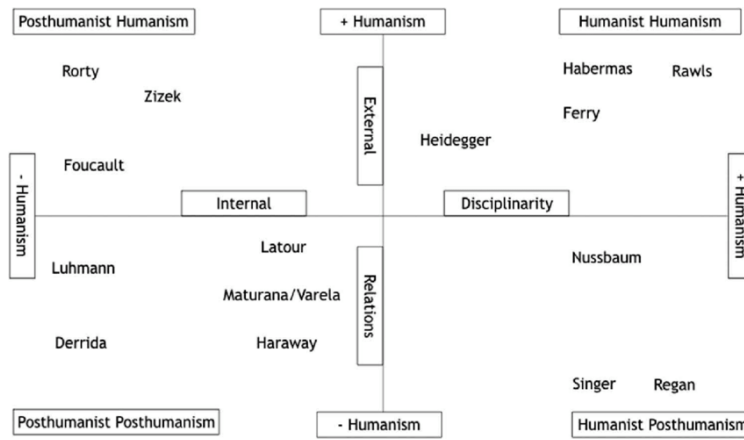
interact with human beings in deeply integrated ways. Technologies like brain-machine interfaces blur the boundary between cognition and mechanical operations, while wearables and prosthetics enhance human capabilities beyond biological limits. These reflect the claim by Hayles (1999) that humans and intelligent computers are increasingly “seamlessly articulated” to constitute a unified system rather than a discrete unit. Hayles’ work portrays how the posthuman perspective radically reviews identity and agency, making human-machine collaboration a fundamental aspect of our evolving situation. Anthropocene human subjectivity and understanding is undergoing a major alteration with the emergence of cybernetic creatures, which are linked to digital and biological networks. A future where human identity is more fluid and intertwined with technology and nature is hinted at by this framework, which not only reshapes the body but also questions the concept of individuality.

2.3. CRITIQUE OF HUMAN EXCEPTIONALISM AND SPECIESISM

While Hayles explores the posthuman condition through technology and information theory, Cary Wolfe offers a critical perspective that challenges human exceptionalism. Wolfe’s contributions to posthumanist idea focus primarily on the critique of human exceptionalism and the ethical aspects of our relationships with non-human elements. In his influential work *What is Posthumanism?* (2010), he argues that posthumanism ought not to be merely viewed as an endorsement of technological progress, rather than that, it should be recognized as a critical framework that interrogates anthropocentric notion and the distinctions among humans, animals and machines.

Wolfe targets conventional humanist principles that prioritize human reason and agency above other life forms and he proposes a more inclusive and ethical assessment of non-human entities. Claiming that posthumanism must transcend the anthropocentric paradigms that have impacts on human cognition and government, he advocates for a more integrated and relational perspective on life.

Figure 4: Cary Wolfe’s “Fourfold Disciplinary”



(Wolfe, 2010: 125).

In his “Fourfold Disciplinary” from *What is Posthumanism?* (2010), Cary Wolfe explores the intersections of various academic disciplines within the context of posthumanism. He underscores the need of synthesizing several intellectual domains such as biology, ethics, philosophy, and technology to tackle the intricacies of posthumanism. Wolfe claims that integrating these disciplines allows posthumanism to provide a more thorough comprehension of humanity in an ever-evolving technology setting. This methodology challenges human exceptionalism and encourages a comprehensive, multidisciplinary analysis of the human experience, pushing for more dynamic, adaptable, and interrelated perspectives on human existence in connection to nonhuman entities and technology. Wolfe’s contribution to posthumanist theory advocates for researchers to dismantle disciplinary barriers and embrace a more cohesive and inclusive methodology in examining human and nonhuman interactions.

Cary Wolfe’s *What is Posthumanism?* (2010) utilizes several theoretical frameworks, such as Derridean deconstruction and systems theory, to investigate how posthumanism might enhance ecological ethics and contest conventional disciplinary boundaries. His ideas are essential in articulating posthumanism as a reaction to the problems presented by modern environmental catastrophes.

Speciesism is a biased ideology or behavior that puts human interests in front of nonhuman beings’ and often justifies mistreatment and exclusion. Rooted in

anthropocentric thought, this philosophy has traditionally justified the exploitation of animals and environment by placing humans at the center of life. Since the Middle Ages, hierarchical structures, such as Aristotle's *Scala Naturae*, privileged human interests over those of nonhuman entities, further solidified by religious doctrines that emphasized the divine superiority of humans over other beings. This ontological hierarchy has justified myriad marginalization and oppression strategies one of which connects humans with animals and ecosystems.

Speciesism enables the destruction of ecosystems and biodiversity because of the privilege of human-defined interests (Braidotti, 2014: 89). Societies built on such an anthropocentric view produce ethical and legal systems that routinely exclude nonhuman species from moral consideration, a form of discrimination that is as insidious as racism or sexism.

As underlined by Başak Ağin (2020), posthumanism advocates for a transition from this hierarchical worldview to “a horizontal or flat ontology”. This alternative Notion emphasizes the interconnectedness and interdependence of all living forms, challenging human-centered perspectives.

In addition to challenging humanity's privileged status, posthumanism critiques the concept of human autonomy. It underlines the profound “entanglement” of humans with other forms of life and calls for acknowledgement of these bonds in shaping ethical and ecological frameworks.

Expanding on this we can review Karen Barad's concept of “agential realism”, which provides a deep critique of speciesism. This anthropocentric conception of agency that confines it to the prerogative of human entities is in direct contrast to the position of Barad (2007), who argues for conceptualizing agency as an intra-active process across different entities, be they human or nonhuman. In demonstrating how all forms of existence are entangled, this serves to disrupt the hierarchical structures underpinning speciesism that Barad critiques. Her framework highlights the human, nonhuman co-constitution and excludes any understanding of the human as a separate organism.

Human's species-based prejudices hinder his fully understanding of the profound interconnectedness between humans and nonhuman elements. These biases hinder the recognition that human existence is inextricably dependent on nonhuman

entities and that all forms of life on Earth are intertwined. Previously, speciesism was associated with animal studies and mainly focused on the hierarchical distinction between humans and animals. However, as technological advancements increasingly made human and technology inseparable elements, a new relationship emerged-human-robot relationship. Gradually, this increasing interconnectedness between humans and robots has given rise to complex ethical questions, necessitating the expansion of speciesism to encompass these evolving dynamics. Barad's concept of entanglement is especially relevant here, since it demonstrates the inseparability of humans and technological beings. This viewpoint invites a reevaluation of ethical frameworks that keep prioritizing humans while seeing the robots as just tools that help humans.

According to Charles Darwin's theory of evolution, people are just another element in the chain of life, rather than an inherently better species. With this idea, anthropocentric positions of beings are tested. While the theory contested the humanist perspective rooted in divine origins of hierarchy, it was not efficient to completely eradicate human superiority ideas. Building on this, posthumanism advocates for an ethical framework that does not discriminate based on species but rather recognizes the intrinsic value of all entities. In order to reimagine humanity's place in the natural world and lessen the impact of ideologies that prioritize human life, it is essential to tackle speciesism in the Anthropocene era.

Following Karen Barad's ideas, what is required for dismantling speciesism is nothing but a radical change in the way we have so far understood and related to matter. The concept of entanglement allows us to transcend hierarchical differences and acknowledges a set of relations which define the living being. Anthropocentrism is at the heart of speciesism, which divides the natural world and blinds people to our interdependence and reliance on things other than ourselves. By providing an alternative to these prejudices and posthuman theory paves the way for a more harmonious cohabitation with all entities.

2.4. THE SHIFT FROM POSTHUMAN ECOCRITICISM TO MATERIAL ECOCRITICISM

“the ways we understand and interact with nature are in need of a commensurate updating”
(Coole & Frost, 2010: 5)

Before delving into posthuman and material ecocriticism, it is essential to look back to the origins and advancement of ecocriticism as a literary discipline. Emerging in the late 20th century, primarily focusing on the depiction of nature in literary texts, ecocriticism aimed to put the connection between humanities and the environment under scope.

Pippa Marland (2013: 846) describes ecocriticism as “an umbrella term for a range of critical approaches that explore the representation in literature of the relationship between the human and the non-human, largely from the perspective of anxieties around humanity’s destructive impact on the biosphere”. Lawrence Buell regards ecocriticism as a mean to promote discussions of a different “earth-centred” and environmental critical approaches (Marland, 2013: 847). He argues that humanity is facing an environmental crisis, only by reconsidering our place in the world we can find a solution to this crisis (Buell, 2011: 87). Our place and mode of being are set by culture. For him, it is the duty of an ecocritic to “unravel and critique the conceptualizations that have been so damaging and to identify traces of those better ways of imagining” (Marland, 2013: 847). At its foundation, ecocriticism is a humanist demand for environmental consciousness; nevertheless, as it develops, it moves closer to posthumanism by challenging the whole idea of human primacy.

While ecological ideas began to take shape in the 1960s, the 1990s marked a period of growing popularity and formalization of ecocriticism as an academic field. The slow development was due to the hesitation of the humanities in taking active role in what was perceived as a scientific problem that time. Additionally, it was very difficult to speak on behalf of the Earth itself, as it required a conceptual change in literary studies that took time to be fully integrated.

The first wave of ecocriticism is also called the reinstatement of the “real”, dealing with the “representation of world beyond the text” (Marland, 2013: 848).

According to Buell, four elements “define an environmentally oriented text”: first, human and nature are deeply interconnected, and human history is shaped by the environment, which in turn shapes people’s understanding (quoted in Marland, 2013: 848). Second, you cannot justify only the actions of humans, what benefits humans may not necessarily benefit non-humans. Third, human beings are responsible to keep the balance of the environment. And four, the environment is in constant change, not a static entity, but a process.

There are two predominant views within ecocriticism: one favours political action to instigate change, while the other focuses on theories. Buell (2011: 110) strongly supports political engagement, emphasizing that ecocriticism should not remain purely on written materials but actively work as an incentive for environmental change.

Another perspective, deep ecology, challenges anthropocentrism by highlighting the inherent worth of all living entities, promoting an egalitarian ecological framework in which humans are not superior to other forms. Humans are the most dangerous factor for nature because of the human oppressiveness over nature. However, social ecology counters this perspective, defending that human oppression over other humans must be resolved first. If we get rid of human-to-human oppression, then we can eliminate human oppression over nature. Social ecology posits that confronting human hierarchies and systems of discrimination is fundamentally connected to environmental justice, since patterns of dominance over individuals often reflect exploitative interactions with the natural environment. Addressing inequality in society may aid in alleviating environmental problems; yet, ecological concerns need unique and context-specific solutions.

The second wave of ecocriticism adopts a more critical attitude towards traditional notions of nature, interrogating its socially constructed definitions by asking: “what is nature?” and exploring its linkages with matters of color, sexual orientation, and imperialism. The third wave of ecocriticism shifts towards considering human experiences from an environmental perspective, emphasizing “world citizenship” and the formation of a globally connected ecological consciousness. For the fourth-wave ecocritics, the human body itself matters, aligning with the “material

turn”, and highlighting “material interactions with more than human world” (Marland, 2013: 855).

These foundational contributions paved the way for posthuman ecocriticism, which not only challenges and deconstructs human-centered stories but also incorporates perspectives from posthumanism and new materialism. Furthermore, by shifting focus from humans and highlighting the activity of non-human beings, posthuman ecocriticism provides a broader framework for comprehending ecological connections in literature. As stated by Oppermann, “[p]osthuman ecocriticism seeks to maintain a sustainable ecological critique of the material interaction of bodies and natures in a highly technologized world and their conceptualizations in literary and cultural texts” (2016: 30).

New Material Ecocriticism argues that human nature has a “material” aspect due to his/her mortal body, which exists as matter in ecosystem. Unlike modernism, which separates subject and object from each other; and materialism, which removes this separation, postmodernism follows humanism, challenging the notion of a stable human subject.

Posthumanism, by its nature, is always posited as an advocate of updates and alterations, which put forward new angles to an issue. According to Serpil Oppermann, “[n]ew material ecocriticisms transform into posthuman ecocriticism and is needed for critical reflection on the emerging reconceptualizations of life, and their scientific, literary and cultural interfaces” (Oppermann, 2016: 24). Karen Barad highlights the “entanglement” of human behaviors in comprehending the environmental relations, arguing that “[...] humans are integral parts of agential intra-acting components of nature” (quoted in Oppermann, 2016: 24). Cary Wolfe’s proposal of “rethink(ing) the notion of the human tout court” and Katherine Hayles’ assertion that people need to adopt new methods of understanding “what being human means” agree on finding other perspectives is necessary (1998: 42; 1999: 285). Posthumanism has consistently questioned the position of humans within the ecosystem and opposed the humanist views of the superior human. With the influence of the new materialist perspective, the status of the human among other living entities is not only delegitimized but also redefined through the recognition of profound interconnections between different

forms of life, dissolving the definite separations that they had before (Opperman, 2016: 25).

In her book *“How We Become Posthuman”*, Katherine Hayles (1999) suggests that if our DNA is composed of both written codes and “matter” that operates based on the proteins, which serve as the building blocks of our bodies, and if this “software” is constantly updated, resulting in material changes within our bodies, we could argue that, since birth, we have always been “material-cognitive” beings—essentially, always “posthuman” (1999: 290-291). Hayles states that posthumanism “does not really mean the end of humanity [...] it signals instead the end of a certain conception of the human” (1999: 286). As the meaning we attribute to the concept is under constant change, so our perception should be adapting to this evolution. As elements of a certain ecosystem, whether we recognize it or not, we are united in “a dynamic co-evolutionary spiral with intelligent machines as well as with the other biological species with whom we share the planet” (Hayles, 2006: 164). We must turn our perspectives into the “interdependency of life” on a shared planet and reassess our influence, instead of merely longing for the loss of the human centrality idea in the chain of existence.

Here, it would be wise to refer to Rosi Braidotti’s “critical posthumanism”, that emphasizes the need for “a new way of combining self-interests with the well-being of an enlarged community, based on environmental inter-connections” (2013: 48). Critical posthumanism lights the way towards ecological posthumanism, which is a state of heightened awareness of the interconnectedness of all elements of ecology and the dynamic fluidity between these elements.

2.5. PLANETARY ETHICS AND INTERDEPENDENCE

Dipesh Chakrabarty’s concept of the “planetary turn” pushes us to reconsider how we view humanity’s place within the broader ecological and geological systems. In “The Climate of History in a Planetary Age” (2021), he argues that climate change has blurred the borders between human history and natural history. Our actions—deforestation, fossil fuel consumption, and industrialization—have geological consequences, marking us not just as historical agents but as elements capable of

altering the planet itself. This change necessitates an entirely new perspective, one that considers Earth not as an observer but as an actor in all human endeavors.

As Chakrabarty notes, “[m]an’s environment did change so slowly as to make the history of man’s relation to his environment almost timeless and thus not a subject of historiography at all” (2009: 204). The slow pace of environmental change in previous periods made it appear negligible to the course of human events. However, this idea currently is not acceptable. The extent of contemporary human activity has positioned us as “geological agents” with adverse side effects on the planet (2009: 206). This understanding compels us to recognize environmental issues as interconnected with all facets of our existence rather than as remote occurrences.

Since our species is now actively involved in geological processes rather than just influencing history, Chakrabarty’s planetary shift highlights the critical need to reconsider our ontological position. Posthuman ethics is broadened by this planetary consciousness into a more comprehensive ecological and temporal framework, one in which people are not distinct from but rather an integral part of the material becoming of the Earth. Rather than a universally applicable moral imperative, the concept of responsibility takes shape in this framework as a call to action to create ways of living together that take into account the interconnectedness of all life on a world that is rapidly changing.

2.6. THE BODY RECONFIGURED

In this chapter, we looked at how posthumanism questions our conventional understanding of the human body by investigating its connections to other entities, technology, and animals. The human body is shown in the works of Haraway, Hayles, Wolfe, Barad, and Chakrabarty as a shape that is not static but rather fluid, hybrid, and interdependent.

By challenging speciesist hierarchies and anthropocentric borders, posthuman embodiment calls for a reorientation of ethics toward interconnectedness, global responsibility, and interpersonal relationships.

CHAPTER THREE

POSTHUMAN AGENCY: RELATIONAL NETWORKS AND NON-HUMAN ACTANTS

In posthumanist theory, human subjects are no longer seen as the only possessors of agency. Rather, it is dispersed throughout many systems, networks, and entities—both human and non-human, biological and inorganic. This chapter brings together several key thinkers—Donna Haraway, Karen Barad, Bruno Latour, and Stacy Alaimo—whose work contributes to the understanding of the anthropocentric notion of agency and highlights entanglement, responsiveness, and co-constitution.

3.1. INTRA-ACTION AND AGENCY

A fundamental aspect of material ecocriticism perceives matter not only as an object but as an active “agent”. The separation between people and nature is fluid; identities and entities are shaped through their interactions.

Rosi Braidotti’s comprehension of the posthumanist subject is further enhanced by Karen Barad’s notion of “intra-action”, since the subject is no longer a static entity, but rather a relational activity. Barad underscores the need for reassessing both physical and metaphysical notions, particularly those rooted in antiquated interpretations of the physical realm. She advocates for the significance of using sophisticated political and social hypotheses to critically analyze our interpretations of social behaviors, especially the material activities that define the boundaries between the “social” and the “natural” (2007: 25). Barad proposes an analytical framework that perceives the social and natural as intricately intertwined, promoting a reciprocal interaction with our most profound insights into these phenomena to elucidate their interrelated dynamics.

Karen Barad first introduced the concepts “intra-action” and “agential realism” in her article “Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter” in 2003, and after that she continued developing these concepts in her seminal work *Meeting the Universe Half Way* (2007). She argues that the notion of matter losing its value and existing only via the influence of the power of discourse

is flawed, so it is an urgency to consider matter and discourse together. She refers to the application of them together as “material-discursive practices” (2007: 146).

Barad claims, due to its “ongoing intra-activity”, it is a must to give “active participant” role to the matter (136). Human and nonhuman entities existing in natural world are constantly engaged in “intra-action”. Unlike traditional understanding of “interaction”, where the properties of subjects or objects influence each other, it is clear and known before. However, in “intra-action”, the subjects or objects “[are not] fixed, [but are] produced and productive, generated and generative [...] agentive, [...] differentiating” (137). This implies that no entity or subject does exist independently; instead, identities are constructed through relationships, showing that they are not static, but relationship based.

Karen Barad’s concept of “agential realism” unites epistemology and ontology, suggesting that reality is not a stable and independent structure but a continuously developing phenomenon (136). The term “agential” denotes the presence of agency: Barad posits that all material entities, not only people, possess a degree of agency, while “realism” refers to the recognition of reality as an actively creating, evolving, relational framework (139).

Barad’s theory deeply unsettles the binary of subject/object by positioning all matter as engaged in world-making processes. Agency, according to Barad, does not require intentionality or planning. Both living and non-living entities possess active agency through their capacity to affect and shape events. Agency, therefore, can be understood as the ability to influence and direct the occurrences. This perspective eliminates the high distance between subject and object, emphasizing that all the things people do/ all the things people cause will eventually affect them. Even dust in the air functions as an agent- it can pile up and impair the breathing of organisms. Similarly, chia seeds, often considered healthy, can produce side effects. Every entity possesses the capacity to respond, a quality Barad refers to as “response-ability”. While all entities are actors within this connective existence, only humans bear the ethical dimension of “responsibility” (2007). Thus, humans need to acknowledge their interconnectedness with the material world and recognize that survival is not an isolated struggle. By embracing this reality, greater ecological awareness can emerge.

Humans should not seek to control nature but rather strive to find ways to coexist and co-evolve within the ecosystem.

3.2. TRANSCORPOREALITY

Stacy Alaimo draws attention to post-humanist materialisms' ideas that humans are "interconnected with the flows of substances and the agencies of environments" (2014: 187). She also discusses the significance of trans-corporeality in the anthropocentric era. Trans-corporeality refers to the idea that "all creatures, as embodied beings, are intermeshed with the dynamic, material world, which crosses through them, transforms them, and is transformed by them" (2018: 1).

Building on Karen Barad's "agential realism", Alaimo shifts the discussion toward the bodily and ecological consequences of material entanglement, making the posthuman subject not only a theoretical node but also an environmental and corporeal site of intra-action. The humanist subject, who positions himself to the first place selfishly, is now under strict investigation, and "the transcorporeal subject is generated through and entangled with biological, technological, economic, social, political and other systems, processes, and events, at vastly different scales" (2018: 1-2). The rigid lines between humans and nature, historically drawn by humans themselves, begin to dissolve, requiring a fundamental redefinition of human ethical responsibilities.

When thinking about how environmental contaminants cross human and non-human borders as they move across ecosystems, trans-corporeality becomes very clear. For example, as mentioned before, microplastics in the ocean do not only contaminate oceans; by contaminating marine species, they make their way up the food chain and eventually end up in the human body via our food. This is how the tangible reality of the ocean becomes an integral part of human biology, rather than an abstraction. Similarly, industrial emissions and other airborne pollutants do not fly around and vanish in the atmosphere; they enter human lung tissues and have an effect on public health all over the world. All of these indicate that the environment is not an abstract aspect existing outside of us, but rather a living, breathing material force that have the capability to influence and change the human body all the time. Here, Alaimo

emphasizes that agency is not merely conceptual or symbolic- it is corporeal, ecological, and systemic. Matter matters in the most literal sense.

Recognizing trans-corporeality calls for a profound shift in how we approach political and ethical issues in the contemporary world. Environmental problems are no longer distant and abstract. Ecological catastrophes happening “somewhere out there”, they are real and deeply bodily realities because the humans are inseparably intertwined with the natural world. This view runs counter to conventional environmental ethics, which often portray people as external guardians of nature, as if we stand apart from the ecosystems we aim to protect. Instead, trans-corporeality reveals that what harms the planet inevitably harms us. It urges us to think in terms of shared responsibility, recognizing that we are not isolated individuals, we are open to interaction and shaped by the world we inhabit. Concerns about climate change, pollution, and hazardous waste are no longer global headlines; they seep into our air, our food, our bodies. In the Anthropocene era, Alaimo’s framework pushes us to rethink what it means to be an ethical subject, reminding us that the boundaries between our own bodies and the world around us are more fluid than we might have believed.

By foregrounding the porousness of bodies and environments, Alaimo brings material agency into ethical and political urgency, reinforcing the idea that human and nonhuman destinies are mutually entangled.

3.3. SEMIOTIC ACTORS AND MULTISPECIES KINSHIP

In her influential works *A Cyborg Manifesto* (1985) and *When Species Meet* (2008), Donna Haraway challenges the idea that puts humans at the focal point of ecology, as do other posthumanists, and seeks to redefine the relationship between human and non-human beings. Haraway’s “semiotic actors” concept invites us to regard any entity, whether living or nonliving, not as a passive object but as an active subject -conveyers of meaning that maintains connections with the external world. These active subjects shape the meaning and relational dynamics within an ecosystem.

According to Haraway, “[t]he codes of the world are not still, waiting only to be read. The world is not raw material for humanization; [...] the world encountered

in knowledge projects is an active entity” (1988: 593). This assertion emphasizes that meaning is not solely imposed by humans onto the natural world; instead, the world itself has an active role in the co-creation of meaning.

Humans are not the only organisms who have the capability to convey meaning but other entities—animals, machines, technologies, natural elements—can also convey meaning, they can play active role in decision making and generate ethical effects. For instance, a robot or artificial intelligence used every day interacts with its user, generates information, and impacts the process of making choices. Another example from daily life is a dog, which functions not only as a pet but also as a semiotic actor via the emotional connections and social roles it establishes with people. This demonstrates that not only humans, but also other elements of an ecosystem can, in various ways, communicate meaning.

In this view, agency emerges from relations and meanings that are not fixed but are constantly being negotiated across species, machines, and natural elements. Haraway highlights the mutable and dynamic characteristics of boundaries, proposing that identities and categories are not static but are constantly negotiated via “material and semiotic interactions”:

[B]odies as objects of knowledge are material-semiotic nodes. Their boundaries materialize in social interaction. Boundaries are drawn by mapping practices; ‘objects’ do not pre-exist as such. Objects are boundary projects. But boundaries shift from within; boundaries are very tricky. What boundaries provisionally contain remains generative, productive of meanings and bodies. Siting (sighting) boundaries is a risky practice” (1988: 595).

As understood from Haraway’s ideas, the borders that constrain traditionally accepted dualities—human/nature, organic/nonorganic, object/subject—are provisional, unstable, and insufficient, and thus always susceptible to transformation.

Haraway aims to highlight that what we call “us”, does not merely include humans. Humans, machines, animals, bacteria, and even climate systems of the ecology are active participants in the production of meaning. With this perspective, she opposes the centrality of human in the ecosystem and advocates for “multispecies kinship”.

I call my body; the other 90 percent of the cells are filled with genomes of bacteria, fungi, protists, and such, some of which play in a symphony necessary to my being alive at all, and some of which are hitching a ride and doing the rest of me, of us, no harm. I am vastly outnumbered by my tiny companions, [...] To be one is always to become with many.” (2008: 4)

This exemplifies Haraway's assertion that individuality is an illusion, since both human bodies and identities are mutually shaped via interspecies relationships.

From semiotic meaning to biological composition, Haraway insists that all beings are part of co-constitutive webs of relations where agency and identity emerge together. For example, an artificial intelligence system is not only a coded program; it is an entity that generates new meanings via data based interactions. Similarly, an insect family not only supports the formation of fruits, vegetables, and other plant products by providing pollination for the reproduction of plants, but also they provide ecosystem benefits such as natural waste decomposition. Moreover, a bee colony not only produces flavorful honey but also facilitates the distribution of pollen to flowers or trees, enabling them to disperse their seeds; and playing have active role in maintaining ecological balance.

In "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin" (2015) article, Haraway emphasizes the urgent need once more to overcome the human-centered ideology and to establish new connections with different species. Considering the profound effects of human activities on the planet in this era, she highlights the need to foster intimate and sustainable bonds between humans and non-human entities. Haraway asserts that all species are undeniably interrelated: "[n]o species, not even our own arrogant one [...] acts alone; assemblages of organic species and of abiotic actors make history" (159). This attention to multispecies entanglement expands agency beyond the individual and instead situates it within historically situated ecological assemblages.

Referring to Jason Moore's arguments on the problem of sustainability of natural resources, Haraway warns that "cheap nature is at an end" (2015: 160). She argues that natural resources should be used wisely and responsibly in the Anthropocene, since during the Holocene epoch, excessive exploitation of the natural resources has caused a major decrease in the natural elements. This unsustainable consumption has resulted in loss of habitat and a dramatic decline in the biological diversity, causing "refugees, human and not, without refuge" (160).

Through the refugee/ refuge metaphor, Haraway offers a powerful illustration. In other words, she mentions the creatures whose habitats have been destroyed by human activities and are described as "refugees" because they require safe places in

which to survive. However, she cautions that, if humanity continues the reckless behavior, there will be no remaining safe shelters— “refuges”—for either human or non-human “refugees” (160). Solely through strong dedication and collective efforts to restore the “refuges”, can all entities “live and die well”, fostering the recuperation and recomposition of ecosystem (160).

To address these challenges, Haraway proposes the concept of “making kin” as a “refuge” for all species. This concept emphasizes creating meaningful bonds that transcend limiting categories such as “sex and gender, race and sex, race and nation, class and race, gender and morphology, sex and reproduction, and reproduction and composing persons” (161). “Multispecies justice” becomes essential in disentangling the conventional ties between genealogy and kinship, as well as between kin and species. Haraway draws attention to the idea that “making kin” differs fundamentally from “making kinds”; kinship does not have to require biological reproduction to continue one’s own lineage. Instead, she advocates for the creating of “relatives without ties by birth” as a more inclusive and compassionate form of “assemblage” (162).

Haraway even explicitly promotes “making kin” with non-human species, instead of “making babies” to continue the same species lineage (163). What is significant, she argues, is not the continuation of the same species but rather the process which kinship is created.

3.4. ACTOR NETWORK THEORY

By questioning the fixed dichotomies that have long defined Western philosophy, Bruno Latour adds to the canon of posthumanist theory. According to Latour (1993), “the nature/culture” and “human/nonhuman binaries” that have influenced Western theories fail to acknowledge the interdependence of all forms of life. His influential work, *We Have Never Been Modern* (1993), challenges the modernist ideas of dividing entities into groups as human or non-human agencies and argues that both agencies are intricate networks of connections.

Latour’s work complements Haraway’s “semiotic actors” by moving from meaning-making entities to systemic frameworks of relational agency. While Haraway

focuses on the actors, Latour maps the relations. Interrogating conventional understandings of agency and identity concepts, Latour's theory functions as an essential theoretical framework for posthuman studies. As Latour explains, Actor Network Theory "does not limit itself to human individual actors, but extends the word actor- or actant- to non-human, non-individual entities" (Latour, 1996: 369). It challenges traditional human-centered view and promotes a reassessment of human exceptionalism by acknowledging the active parts of nonhuman actors within ecosystems, leading to a broader awareness of the unity of all entities. All the entities in an environmental system—either human, technological, or natural beings—are not "passive participants but active agents that shape and shaped by their relationship within a network" (1996: 371).

This viewpoint is crucial for examining the ethical and existential issues raised by the posthuman condition, which enhances the discourse on the possibilities of a world where the distinctions between human and non-human are highly ambiguous. Using some of the most "simplest properties of nets", the theory is then enhanced by the incorporation of an actor who performs actions; this ontological component significantly alters the theory (1996: 371). By stating these ideas, he highlights how agency is not determined but continuously evolving through the interactions between different "actants".

Latour's work fosters a reassessment of traditional agency relationships by advocating for an inclusive comprehension of existence. He highlights the fact that all life forms are interconnected, and they together shape the social and material aspects of life. By doing so, Latour challenges top-down structures and stresses the need of acknowledging decentralized agency in a globalized environment.

Bruno Latour's "Actor-Network Theory" posits that the distinction between nature and culture is untenable, framing all entities—both human and non-human—as actants within interconnected networks. The theory puts forward the idea that agency is disseminated throughout a network of relations, rather than being confined to individual subjects. This perspective facilitates an examination of the ways in which literature and ecological discourse shape and allocate agency between human and non-human entities. Latour's distributed model of agency allows scholars to trace how

materials, technologies, environments, and humans collectively produce action and meaning—challenging individualist and anthropocentric ways of thinking.

Critically examining the established distinctions between language and materiality, Latour's work provides a theoretically grounded approach to nonhuman entities that acknowledges the agency of nonhumans in view. This theory, which treats texts and objects as ontologically significant, offers a basis for understanding how agency acts in both human and nonhuman surroundings. This, for instance, is crucial within a conceptual frame for material ecocriticism, which is interested in interrelations of matter, agency, and meaning across ecological and cultural contexts.

To elaborate on what Latour meant by Actor-Network theory, it would be useful to provide specific example situations. Each element—such as CO₂ emissions, the melting of ice, or the increase in the sea levels—functions as an active element within the ecosystem because it has the power to change the actions taken by humans. For instance, climate policies, geopolitical choices, and cultural narratives surrounding environmental disasters are all impacted by the actant of melting Arctic ice, rather than being mere passive outcomes of human actions. This example indicates how glaciers, climate change, and ocean currents are not passive observers but active participants in and shapers of ecological and cultural debates.

Moreover, even scientists refer to islands floating in the middle of ocean that are made of plastic waste, showing us one of the striking, undeniable pieces of evidence of the consequences of human wrong choices. Despite being man-made, plastics take on an agency role in the terrestrial and marine ecosystems due to their durability and widespread impacts. For instance, microplastics can enter food webs, influence the behavior of various animal species, and even have an impact on human health through the food chain. They become active players in ecological narratives for a very long time since their very presence affects public awareness campaigns, scientific research, and international environmental legislation. From a material ecocritical standpoint, plastics in the water represent stories of consumerism, global capitalism, and ecological destruction. Materials have the power to influence both the physical and cultural environments; these actants reveal the deep entanglement between human actions, technological advancements, and ecological consequences.

Another example is infrastructure, which is often perceived as a static and an inanimate element. Considering a dam: it is more than just a piece of engineering genius; it acts as an actant within a network that covers rivers, ecosystems, human settlements, and power grids. A dam's material agency is evident in the ways it alters landscapes, impacts human habitation layouts, and interferes with natural ecosystems. Its presence affects biodiversity, alters farming methods, and even sparks social and political disputes over water rights and environmental justice. The dam is a prime example of the role of constructed environments as mediators between people and non-humans, according to the material ecocritical perspective. The dual impact of the dam on social and ecological systems highlights the need for material agency in comprehending the complex dynamics of ecosystems.

In conclusion, agency is reimagined as a dynamic force that goes beyond the human-nonhuman boundary in Bruno Latour's "Actor-Network Theory". An important instrument for material ecocriticism, Latour's theory disproves anthropocentric views by showing that non-human and human actants both have power to influence ecological systems.

3.5. RETHINKING AGENCY BEYOND THE HUMAN

The notion of agency, formerly rooted in human-centered, purposeful actions, is fundamentally reinterpreted in posthumanist discourse. The works of Barad, Alaimo, Haraway, and Latour together convey a nuanced understanding: agency is not an ability exclusive to subjects but an entangled, diffused force permeating bodies, technologies, surroundings, and natural systems.

Karen Barad's "agential realism" provides a fundamental transformation by dissolving the distinctions between subject and object. From the perspective of intra-action, she demonstrates that entities arise from interactions rather than existing prior to them. Agency is not something one has but is a state of becoming-with.

Stacy Alaimo expands the concept of agency to include the physicality and substance of environmental existence, based on this relational ontology. Her "trans-corporeality theory" emphasizes the permeability of the human body and the ethical

need to acknowledge that environmental degradation ultimately affects humans as well. Bodies are not only affected by environmental changes, but they are part of them.

In contrast, Donna Haraway emphasizes the linguistic and emotive aspects of these entanglements. The “semiotic actors” emphasize that meaning is collaboratively generated by creatures—including animals, robots, microbes, and ecosystems. Through “making kin” Haraway presents a profoundly ethical approach to ecological crisis: the development of multispecies relationships based not on reproduction but on responsibility and care. Agency is situated within relational narratives, companionship, and mutual weaknesses.

Finally, Bruno Latour broadens the scope of agency to include intricate and extensive networks. Within ecological and technological systems, the “Actor-Network Theory” exposes how actants, both human and nonhuman, coproduce results, therefore dismantling anthropocentric hierarchies. Even inanimate objects like glaciers, microplastic particles, and dams are becoming characters in stories about politics, climate change, and survival.

Rethinking these ideas together, these thinkers call for an ethics beyond human beings that does not recognize any distinction- between people and the natural world, meaning and matter, or physical forms and larger systems. Their ideal world is one in which agency is not static but rather an ever-evolving network of relationships. This reconsideration is not only theoretical but also critically important since it demands a fresh look at concepts like responsibility, justice, and accountability in this age of ecological instability. Therefore, seeing that as humans we are never really alone in our deeds, impacts, or being is to recognize posthuman agency. Humans are merely a part of the natural system, not apart from it.

CHAPTER FOUR

NARRATIVE AGENCY AND ENVIRONMENTAL DISCOURSE

Timothy Morton's definition of "hyperobjects—large-scale objects" (2013) aligns with Iovino and Oppermann's interpretation of "storied matter" via more localized and tangible ecological tales:

[T]he world's material phenomena are knots in a vast network of agencies, which can be "read" and interpreted as forming narratives, stories. Developing in bodily forms and in discursive formulations, and arising in coevolutionary landscapes of natures and signs, the stories of matter are everywhere: in the air we breathe, the food we eat, in the things and beings of this world, within and beyond human realm. All matter, in other words, is a "storied matter" (Iovino & Oppermann, 2014: 1).

The material ecocriticism approach provides a framework that conceptualizes matter as an "active agent", rather than a "passive object", thereby generating meaning and narratives. In the Introduction section of their seminal book, Serenella Iovino and Serpil Oppermann (2014) assert that ecocritical studies have predominantly centered on human narratives; however, they argue that matter generates its own narratives, providing an original approach to comprehending ecological processes that extend beyond human-centric perspectives. By moving the emphasis from anthropocentric storytelling to the generating power of matter, material ecocriticism opens a path to reevaluate how ecological meaning is produced. In the outside world, "the inanimate matter" and nonhuman entities exist together, and "the inanimate matter" has been mistakenly regarded as "passive, inert, and unable to convey any independent expression of meaning" (2014: 2). This erroneous belief in matter's inertia originates from Enlightenment traditions that value rational thought and language more than material manifestation. By giving matter itself narrative power, material ecocriticism alters the current framework.

4.1. MATTER AS NARRATOR

Humanist ideals have traditionally confined ethical considerations to only human agents, boosting a misconception of human exceptionalism. This perspective has fostered the belief that humans exert control over nature through technological

advancements. The prevailing “break-it-and-fix-it mentality” assumes that since humans are responsible for ecological crises, they can likewise resolve them at will through the appropriate technological interventions (Phillips & Sullivan, 2012: 446).

Material ecocriticism extends beyond the analysis of human narratives, positing that the natural and cultural environment functions as a “narrator” as well. The excessive warming of weather, the drying up of a river, the combustion of a forest, or the discharge of plastic waste into the ocean conveys a distinct narrative independent of direct human intervention. Furthermore, humans are compelled to reevaluate the borders that separate nature and society as a result of these events, which serve as tangible evidence of more extensive ecological processes.

As can be understood from this sentence, natural incidents do not only have physical aspects but also, they have narrative aspects. By acknowledging these incidents as stories that convey information, humans will be open to new perspectives on ecological alterations. This narrative shift in material ecocriticism indicates that natural processes do not only occur; they communicate, caution, and react. Within this approach, nature is not a passive backdrop but an articulate, interactive contributor to the construction of meaning.

Societal stories and the physical world are interdependent; matter serves as a structure where historical and ecological processes are interconnected. For example, coal utilized during the Industrial Revolution served not only as an energy source but also as a significant factor influencing social change, the emergence of capitalism, and the subsequent climate change incidents followed it in the 19th century. This exemplifies the storytelling potential of material factors in capturing intricate ecological and historical processes of time. Material becomes an archive and its traces carry the imprints of both natural and human histories. Thus, these stories are integral to our collective narrative in some way.

Environmental catastrophes and crises of nature must be analyzed not solely from a human viewpoint, but also through the narratives “generated by matter”. For instance, rising sea levels, melting glaciers, and microplastics in the oceans represent both environmental phenomena and embedded narratives within their material aspects, each telling a story of ecological transformation and human impact. When recognizing these phenomena as narrative agents, we recognize that they signal the results of

human activities and call for a more comprehensive examination of environmental change.

4.2. ABIOTIC NARRATIVES AND TECHNO-MATERIAL STORIES

The dynamic and ever-changing nature of the connection between story and materiality is emphasized by Iovino and Oppermann (2014). Although material reality influences storylines, tales themselves are transformed and reshaped by matter. “It is quite arduous for humans to declare their agentic interdependence in a hybrid, vibrant, and *living* world” (Iovino & Oppermann, 2014: 3).

According to Oppermann, “The central argument of material ecocriticism –that matter is endowed with creative expressions, manifesting as storied matter, and that creative materiality is encoded everywhere – is amplified in its new form with the inclusion of matter’s abiotic components that are transmitted through techno-scientific practices” (2016: 29). Here, Oppermann broadens the concept of narrative agency to include not just the biological or living realm but also the inanimate components of nature—such as stones, air, water, metals, and plastic—whose material existence and alteration communicate meaningful narratives.

Matter is no longer regarded as a passive element; instead, it is understood as possessing an inherent ability for creative expression. This inherent creativity is conceptualized as “storied matter” referring to the matter’s capacity to convey its own story or “narration” through its material existence. It is based on the idea that matter everywhere can produce meaning or contain some kind of “narrative”. The concept of narrative is not limited to merely living organisms; to encompass “abiotic components”—inanimate” natural elements such as stones, water, soil and air— that also participate in this creative process (2016: 29).

These narratives become comprehensible via scientific analysis, ecological observation, or artistic depiction, enabling human observers to identify material agency as narrative agency. The stories of the inanimate elements can be communicated or become visible through technological practices. For instance, the rings of tree not only indicate the biological aging of the trees but also serve as historical documentation of ecological changes that the tree lived through. Similarly,

a block of ice's melting is not only a physical process; it also encapsulates the story of climate change and global warming within itself, serving as a material witness to environmental alterations. Moreover, an artificial intelligence tool or plastic waste in the ocean carries the imprints of technological processes that led to their creation or ecological processes that resulted in ecological degradation. This clarification encourages people to recognize the stories emerging from material phenomena are just as intricate and important as stories created by humans. Plastic, ice, and even algorithms narrate their own journeys, characterized by extraction, creation, exploitation, and degradation. The dynamic interaction between human and nonhuman factors reveals multi-layered stories and deepens our comprehension of ecosystem.

Oppermann adds to her views, "[t]he principal concepts of material ecocriticism—storied matter and narrative agency—that explain the agentic dimension of living matter in terms of its stories, are particularly suitable for exploring the emerging posthuman agencies, the technological posthuman forms" (2016: 30). This highlights how material ecocriticism offers essential tools to examine both "biotic" and "abiotic nonhuman." By highlighting the interdependence of all material factors in determining ecological outcomes and adding nonhuman narratives to the discussion, this analytical perspective contributes to literary criticism and policy on the environment.

4.3. POSTHUMAN KINSHIP AND NARRATIVE ETHICS

Drawing on Donna Haraway's ideas of "making kin", this critique portrays that human and nonhuman bonds are entangled in ways that urge us to recognize the only way to exist well is together (2015: 159). Haraway's invitation to "make kin" (2015) promotes a reevaluation of kinship beyond biological relations. This concept resonates with material ecocriticism, as it invites a relational ontology where matter is not only meaningful but also kin—a co-participant in the narrative that shape mutual futures. The dynamic stories conveyed by natural elements—like a tree's story that documents centuries of ecological history in its rings—are essential to our comprehension of the biosphere. Erin James (2017: 267) contends that tree rings, as a chronological series of events, fulfill the criteria of a basic narrative. She posits that trees can convey their

own stories; however, these narratives are less intricate, devoid of elements such as “focalization, metanarration, or heteroglossia, [and] they are also incapable of altering the chronology of events”. Consequently, nature is not merely a setting for human activities but an active agent in the formation of meaning and conveys its own “tales” incessantly.

Material ecocriticism is an appeal to rethink ecological debates. Instead of seeing the natural world through a human-centric filter, ecocritics are invited to think of the natural world as a material narrative, in which human and nonhuman actors engage in a continuous conversation regarding the species shared destiny.

Haraway’s “making kin” enhances this discourse by advocating for a sense of responsibility: recognizing the narrative agency of nonhumans not just as symbolic entities but as ethical and corporeal beings that demand accountability. A tree, a glacier, a polluted water -each convey a narrative while imploring people to heed their message.

4.4. NONHUMAN VITALITY AND THE FUTURE OF NARRATIVE

To conclude, “[m]atter in every form is a meaning producing embodiment of the world” claims Karen Barad, (2007: 335). This assertion recasts matter as more than just a setting for human actions; it portrays it as an actor in the construction of meaning. Traditional ecocritical methods mostly center on human stories; however, the idea of “storied matter” challenges this assumption. “Storied matter” calls for the inclusion of nonhuman voices—such as trees, rivers, mountains, and other natural agents—thereby helping us comprehend environmental change from a more holistic perspective and opening new ways for analysis. This viewpoint not only challenges the traditional ideas of humans’ place in the ecosystem, but it also questions the anthropocentric narrative that has long neglected or downplayed the significance of the narratives of various natural elements.

From the perspective of material ecocriticism, nonhuman and abiotic entities function as active narrators—agents that embody ecological memory, historical significance, and ethical implications. The melting of glaciers and the emergence of

rings of trees are tangible phenomena that not only record environmental changes but also articulate them, fostering a multispecies interaction with humanity.

Drawing on Haraway's concept of "making kin," this chapter explores that narrative agency is about more than just having a voice; it is also about being present, having relations, and being able to respond. In fact, nature has never been quiet. To listen to its voice is a posthuman action, which is an ethical devotion to coexistence and support.



CHAPTER FIVE

POSTHUMAN ETHICS AND MULTISPECIES LIVING IN HARMONY

5.1. STAYING WITH THE TROUBLE: ETHICS IN TIMES OF CRISIS

The Anthropocene is a period in which people have been the dominant drivers of alteration on the planet. Not only humans have rapidly overpopulated the planet, but also they have depleted underground resources, degraded ecosystems, and set the world on a path toward uninhabitable climate change. As a result of human recklessness, humanity is on the verge of a global ecological catastrophe.

In her fundamental work *Staying with the Trouble: Making Kin in the Chthulucene*, Donna Haraway (2016) advocates for the idea that people should face the environmental and social problems they face, instead of trying to ignore or run away from them. According to Haraway, people should not see these difficulties as issues to be fixed but as opportunities to learn and grow in times of crisis. Rather than being a static problem, the “trouble” she describes is the ever-changing reality of our environment, where we face the constant challenge of figuring out how to coexist with different forms of life in an ethical and responsible manner: “[t]he task is become capable, with each other in all of our bumptious kinds, of response” (1). For Haraway, “staying with the trouble” goes beyond embracing the existence of difficulties, but it is about actively addressing ecological crises and questioning human-centered viewpoints in order to promote a more responsible and interdependent way of living. This approach reimagines environmental ethics as a process of engagement, not avoidance—an ethical entanglement rather than detachment.

5.1.1. Reframing Environmental Action: From Resolution to Responsibility

Haraway’s concept of “staying with the trouble” critiques conventional methods in environmental activism that prioritize merely resolving environmental problems. It promotes a participatory and holistic approach to addressing the world’s ecological challenges. Environmental movements, historically the ones focused on

crisis resolution, should transition to acknowledging the uncertainties and complexities of environmental crises, understanding them as intrinsic to life on Earth.

Haraway's theory encourages activists to pursue solutions while simultaneously reexamining their relationships with the planet and nonhuman species. In the never-ending quest for climate justice, this concept takes on further significance as we shift our attention from only avoiding damage but also responsibly navigating environmental disruptions.

As Haraway (2016) states, there are two major views on the results of horrors of the Anthropocene and the Capitalocene: one is the belief in God that "will somehow come to the rescue of its naughty but very clever children", and the second is the belief in the notion that "the game is over, it's too late, there's no sense trying to make anything better" (3).

However, without denying the hard times waiting for the humanity, she opposes these two perspectives, putting forward a third possible way – "staying with the trouble" (4). She promotes mutual becoming of organisms: "making oddkin", and states that by this third way "we require each other in unexpected collaborations and combinations, [...] we become-with each other or not at all" (4). This alternative way prioritizes interdependence, collaboration, and ethical responsibility, rejecting both utopian denial and dystopian despair. She suggests that humans, instead of trying to fix the world, need to engage in what she calls "becoming-with", a process of co-evolution with other species, recognizing the interdependency of all entities and coming to the conclusion that humans are the responsible for maintaining an ethical coexistence.

5.1.2. Mutual Becoming and the Ethics of Coexistence

The idea of "mutual becoming" highlights the interdependent and mutually reinforcing interactions between all living entities. This idea disproves the anthropocentric perspective, which puts people first in nature. Ethical interaction between people and other animals is instead advocated, along with the idea that all parts of the environment are interdependent.

This interdependence necessitates a shift in human perspective from that of superiors to that of dependent creatures regarding the natural world and other species. Haraway emphasizes as fundamental to “becoming-with” the idea that humans may build more sustainable and considerate with the Earth by embracing an ethic of “mutual becoming”. This will guarantee that all species are treated with respect they merit. The concept of “becoming-with” offers a new way of looking at ethics, one that is based not on authority but on companionship and contextual responsibility.

The aim of this dissertation is to put the relation between the natural and human along with the relation with human and technology under scope, analysing the struggle of human in geological time periods –Anthropocene, Capitalocene, Chthulucene-, settling to the view that in order to “stay with the trouble”, humanity needs to avoid seeing dark visions of future or mourning about the beautiful past; adopt a “tentacular thinking” and “learn living and dying in response-ability on a damaged earth” (2).

Haraway’s concept of “tentacular thinking” invites us to a reevaluation of our relationships with the world as interrelated, multifaceted, and active. It challenges linear and reductionist perspectives, advocating for a more holistic and expansive approach to engaging with the planet and its residents.

Through highlighting the interdependence of all living entities, Haraway’s theory presents ethics as something that naturally arises from our shared existence, rather than something that people impose on the natural world.

5.1.3. Tentacular Thinking in Practice

The concept of “tentacular thinking” expands on the notion of interconnection by arguing that people should open their minds to the complexity and interaction of life rather than limiting themselves to set limits when engaging with non-human elements. This way of thought goes beyond environmental concerns and invites people to stop viewing the world through anthropocentric ideas, acknowledging the inherent agency and worth in all living things. As humans, we need to broaden our angles and understand the interconnectedness of all entities on Earth as the metaphor of “tentacles” implies. Opposite to humanistic viewpoint, tentacular thinkers believe that humans should take an active role in maintaining an interactive role in the ecosystem.

This method of thought is profoundly political and ethical, requiring knowledge of both connections and the responsibilities emerge from them.

The Anthropocene is the geological period when humans' activities' consequences are highly visible. What is believed to follow Anthropocene is the "Capitalocene", which is the period when the economic system is recognized as a factor that regulates the relationship between humans and the rest of the ecosystem. According to Haraway, "capitalocene" refers to a time "when man, made in the image of vanished god, takes on superpowers in his secular-sacred ascent" (47). As a cure for the negative impacts of "Anthropocene" and "Capitalocene", we need to acknowledge that "to renew the biodiverse powers of terra is the sympoietic work" and unlike the previous eras, it is "made up of ongoing multispecies stories and practices of becoming-with in times that remain at stake, in precarious times, in which the world is not finished and the sky has not fallen—yet" (55). Thus, Haraway proposes Chthulucene as an alternative third story, "a third netbag for collecting up what is crucial for ongoing, for staying with the trouble" (55). With the Chthulucene, "the order is reknitted: human beings are with and of the earth, and the biotic and abiotic powers of this earth are the main story" (55). And she foreshadows the future as "[t]he unfinished Chthulucene must collect up the trash of the Anthropocene, the exterminism of the Capitalocene, [and] make a much hotter compost pile for still possible pasts, presents, and futures" (57).

According to Donna Haraway, all people live in "troubling and disturbing times". Our duty is to "become capable with each other"; our duty is to "learn to live and die well" with each other. "Tentacular thinking" therefore transcends metaphor to serve as a methodology- a means to traverse unknown futures by interlinking new relationships and responsibilities across species, temporal dimensions, and ecosystems. This concept highlights that living with the trouble is not just a passive act but requires an active, ongoing learning time where humans must engage with the ecological problems in a responsible and result-oriented collaborative manner. We need to learn how to settle down the confusion created by humanity and rebuild quiet and peaceful places for the benefit of not only the humans but all living species. Many people attempt to dream a safe future, by clearing away the troubles of present and past events. However, "staying with the trouble" is different, requiring learning to be

truly present, not as a vanishing element between dreamy pasts and apocalyptic futures. “Staying with the trouble” encourages engagement with the current moment, advocating for confrontation of present chaos instead of retreating into nostalgia or dark dystopian future scenarios.

Acknowledgment of the connection of all life forms is essential, recognizing that humans are no longer a central force to the ecosystem. We must adopt an ecologically conscious coexistence with nature and all entities to ensure survival and maintain the system balance.

It requires humanity’s understanding of the importance of the balance in the world, where humans are no more at the center of the ecosystem, but rather participants in an intricate web of life, coexisting with other species in harmony. Humans have to do their best to preserve the natural things and treat other living species well in order to continue their survival.

5.1.4. Sympoiesis and Symbiogenesis

The basic definition of sympoiesis is “making-with”; and in a long way, it is described as “complex, dynamic, responsive, situated, historical systems” by Donna Haraway (Haraway, 2016: 58). It is an active and co-evolutionary process by which life forms interact and create new systems. It is fundamentally about interdependence, mutual creation, and the complex web of relationships that shape life on Earth. This notion underscores Haraway’s overarching perspective of tentacular thinking and enduring challenges: existence is not generated in solitude, but via collective histories and interconnected relationships.

In contrast to the conventional, individualistic perspective of survival where organisms had to fight for the natural supplies, sympoiesis embraces an approach which is in favor of a collaborative and communal survival. For instance, when we observe the mutual relationship between bees and flowers, we comprehend bees gather nectar from flowers for their nutrition, whereas flowers benefit from this relationship in spreading their seeds by the help of bees (68). An interdependent existence like this illustrates Haraway’s “making-with” concept, which emphasizes that success requires teamwork rather than individual work.

Haraway uses vivid imagery to explain how “critters” or creatures “interpenetrate one another, loop around and through one another, eat each other, get indigestion, and partially digest and partially assimilate one another, and thereby establish sympoietic arrangements” that are formally called “cells, organisms, and ecological assemblages” (58). These examples emphasize that even the most basic units of life are shaped through multispecies contact and exchange. These interactions, despite being complex or uncomfortable, constitute the core of biological and ecological systems. She further continues her description with examples, an example from the interaction between bacteria and humans. Humans depend on symbiotic bacteria in their digestive systems that facilitate food digestion and vitamin production, and bacteria need humans’ stable habitat and protection. As is obviously understood from this example, both sides are continuing their evolution and existence in a mutual well-being.

While conventional evolutionary theory places an emphasis on natural selection and competitiveness, symbiogenesis gives significance to mutual benefit and partnership. Within this concept, Haraway demonstrates how all living forms, including humans, are dynamically coevolving within a system of dependency.

Humans are not an island apart from the natural world; rather, they are all entangled in a system of dependency that calls for a moral deliberation and responsibility. Haraway critiques the notion of human separation from nature, positing that humanity is situated within a broader ecological structure. Symbiogenesis, in this sense, becomes an ethical framework as much as a biological one, highlighting the necessity of living “with” rather than “over” other beings.

In the light of this, symbiogenesis, by necessitating a reevaluation of our position within natural world and seeing ourselves as integral components of this system, appears to be a crucial notion for comprehending sustainable coexistence patterns in the ecosystem.

5.1.5. The Impact of Haraway's Theories on Posthuman Ethics

Haraway's vision of multispecies entanglement, tentacular thinking, and sympoiesis contributes to a broader ethical framework that aligns with the posthuman turn in contemporary thought.

Considering the co-evolution and interdependence of all entities, symbiogenesis prompts a reevaluation of our ethical duties. Haraway's ideas also correspond with posthuman ethics, which challenge anthropocentric views and advocate for more inclusive collaborations that consider the well-being of all species.

Posthumanist demands for acknowledging the intrinsic worth of nonhuman living forms are similar to Haraway's emphasis on collaborative responsibility. With the posthumanist emphasis on cooperation and cohabitation with nonhuman entities at its core, her writings encourage a reconsideration of the meaning of ethical life, arguing that our moral duties transcend human society to include a wider ecological web of life. This transition is particularly pertinent in light of global crises, because ethical action must extend beyond human limitations. For example, the ongoing environmental crisis, characterized by deforestation, a variety of pollution, and climate alteration, adversely affects human societies and numerous other species.

Haraway's framework emphasizes the urgency of adopting an ethical angle and acting responsibly toward the natural world and its inhabitants. Haraway posits that "making-with" serves not only as a philosophical concept but also as a practical instrument for fostering a more livable world. This invitation encourages a transition from a perspective of separation to one founded on mutual understanding and acceptance. According to Haraway, ethics is not a fixed notion but a dynamic practice that is anchored in contextual connections, interdependence, and a collective future including both human and nonhuman existence.

5.2. ROSI BRAIDOTTI: POSTHUMAN SUBJECTIVITY AND ETHICAL COEXISTENCE

Rosi Braidotti is a key figure in studying posthuman and its ethical implications. She asserts an ethical consideration which is not bound to human-

centered ideals, but also cares for natural, technological, and nonhuman aspects. According to Braidotti, posthumanism, focusing on “alternative ways of conceptualizing the human subject”, necessitates humans’ entanglement with the ecosystem, including not only the other species but also other elements of the material world (2013: 37). With this understanding, “human” is accepted as an entity that has “ethical responsibility”. Braidotti’s perspective aligns with Haraway’s interdependent vision, but redirects attention from ecological activities to philosophical subjectivity—examining the definition of humanity in a profound interrelated world.

In her assertion as “[t]he displacement of anthropocentrism and the scrambling of species hierarchy leaves the Human un-moored and un-supported”, by displacing the human-centered ideas, she highlights the restructuring of human relationships with nature and other beings (Braidotti, 2013: 145). An ethical framework that gives equal weight to all forms of life and the natural world should replace thinking focused on merely humans.

5.2.1. Ethical Responsibility in an Interconnected World

According to Braidotti, there is a gift network that is built by various species in an ecosystem. Our interdependencies with other elements of nature, biosphere and ecosystems are multifaceted. People need to understand the fact that in order to live in harmony with the natural world around them and other species, they have to form mutually beneficial relationships. The relationship between bees and flowers exemplifies Braidotti’s concept of mutual interdependence. Bees facilitate the pollination of flowers, helping in seed distribution, while obtaining nectar from these flowers as nutrients. In a posthuman ethical framework, humans must recognize their position within an interconnected network, not as distinct from or superior to nature, but as active participants in a system that sustains life. The decline of a component within this system, such as bee populations, can lead to significant repercussions for the entire ecosystem, including implications for human survival. This ethical perspective resonates with Haraway’s concept of “becoming with,” but Braidotti adds a more powerful ontological focus on the collapse of binary distinctions such as nature/culture and human/machine.

She further highlights the breakdown of separation between nature and culture; “[t]he dualistic distinction nature-culture has collapsed and is replaced by complex systems of data-feedback, interaction and communication transfer” (145). With this breakdown, human and natural world relationships have an opportunity to be reformed since the boundaries are becoming permeable. The blurring of natural and cultural boundaries, brought about by this breakdown, changes the ways humans interact with the environment. The increasing responsibility that man has in his connection with nature is a direct result of his need to build a life that unites technology and nature. For example, in addressing the climate crisis, linear thinking may propose a direct solution: decreasing carbon emissions as soon as possible to slow down global warming. Non-linear thinking recognizes the complexity and interconnectivity of the issue. Non-linear approaches may encompass the analysis of chain reactions in ecosystems, wherein deforestation contributes to climate change, subsequently accelerating species extinction, which further destabilizes local communities. This acknowledgement of complexity results in a transformation in ethical viewpoint.

5.2.2. Reimagining the Humanities in the Posthuman Condition

Braidotti critically examines the ethical dimensions of human interactions with nature and the environment within the framework of posthuman ethics. The integration of technology and nature necessitates that humans engage as integral parts of ecosystem, rather than merely as responsible entities. This view requires a more meticulous and accountable approach to matters such as animal advocacy and environmental justice.

To portray a vivid example, the factory farming topic might be reframed within a posthuman ethical paradigm that includes non-human animals in moral consideration. Posthuman ethics promotes mutual respect and responsibility for other species, recognizing that animals are life forms rather than resources ready to be exploited.

By stating the idea that “[p]osthuman subjectivity reshapes the identity of humanistic practices, by stressing heteronomy and multi-faceted relationality, instead of autonomy and self-referential disciplinary purity”; she posits that humans must

construct their identity considering both their autonomy and connections with other elements (145). This is a significant idea, as “heteronomy” fosters humans to view their identity not in isolation but in a collaborative cycle.

Today, humanities “rest on post-anthropocentric premises and technologically mediated emphasis on Life as a zoe-centred system of species egalitarianism” (146). She proposes that in the current times, instead of longing for a beautiful and peaceful past, the Humanities should accept the new conditions for the future well-being. Humans must make a concerted attempt to reimagine the study of humanities within a modern, interconnected world and to establish new standards of ethics befitting our “posthuman condition” (150). She further states, “[a]ffirmation, not nostalgia, is the road to pursue: not the idealization of philosophical meta-discourse, but the more pragmatic task of self-transformation through humble experimentation” (150). Both Braidotti and Haraway, in their respective defenses of situational experimentation and rejections of apocalyptic or idealized narratives, stress the need for affirmation over nostalgia. In terms of ecological situations, posthuman ethics encourages proactive and action-oriented consideration beyond melancholy.

5.2.3. Memory, Non-Linearity, and Environmental Justice

As foundational principles for her posthuman critical theory, Braidotti suggests the “golden rules” of methodology: “cartography accuracy”, “trans-disciplinarity”, “the importance of combining critique with creative configurations”, “the principle of non-linearity”, “the powers of memory and the imagination and the strategy of defamiliarization” (Braidotti, 2013: 163). These rules fundamentally promote mutual understanding and caring of humanities and ecological studies. She further explains, the “cartography accuracy” is about comprehending the relationship between information and power correctly. Each idea is formed by its place and time/geography and period; this means information is limited and cannot be applied globally (164). In short, this term alludes to the intellectual understanding of how one fits within a hierarchical power structure. Braidotti advocates for a Humanities that is adaptable, reflective, and contextually aware via these methodological instruments.

Braidotti provides a similar clarification of her usage of “non-linearity”, suggesting that “it would be self-defeating for the Humanities to stick to the traditional rule of visualization by automatically adapting linear thinking” (164). In other words, rather than approaching problems with linear thinking, we should evaluate each issue on its own conditions. “Non-linear thinking” in posthuman ethics pushes us to address global issues like climate change and technology influences with a flexible and understanding attitude.

According to Braidotti, memory is “the active reinvention of a self that is joyfully discontinuous, as opposed to being mournfully consistent” (167). In other words, memory is not a static or consistent element; rather it is fluid and constantly reconstructed. Since memory is not inherently tied to objective reality, it has power to reconstruct an individual’s perspective through discursive practices. The subjective perspective arises not merely from “linear” accumulation of memories, but from a position influenced by an already flawed narrative of memory. This structure facilitates change, as individuals are no longer bound to a fixed and undeniable basis for comparison. Instead, they can reinterpret memories using entirely novel verbal methods. This reimagining of memory as a place of narrative agency ties back to the earlier discussion of “storied matter”, which implies that people are also storied beings-capable of change and growth. To demonstrate this idea, communities uprooted by environmental catastrophes may recreate their collective memory to review long-term exploitation, which may influence their “environmental justice activism”.

Braidotti argues that the posthuman period is highly significant for humanities and “[they] need to embrace the multiple opportunities offered by posthuman condition” (172). The posthuman condition will lead people to new perspectives for solving complex and dynamic ecosystem problems. She urges the humanities to take active role in “real world problems”.

5.2.4. Collective Ethics and Multispecies Responsibility

All in all, Braidotti claims that “to be posthuman does not mean to be indifferent to the humans, or to be de-humanized. On the contrary, it rather implies a new way of combining ethical values with the well-being of an enlarged sense of

community, which includes one's territorial or environmental inter-connections" (2013: 190).

She highlights that "ethical bonds" differ from conventional perspectives. Classical humanism and Kantian universalism establish ethical responsibility on the foundations of personal gains and equality for all (Nussbaum, 2006). She posits that posthuman ethics should prioritize mutual and harmonious existence rather than focusing on individual gains. This is the perspective that promotes equal and mutual responsibility of all entities living or existing together on a shared world. By looking beyond humans, this perspective acknowledges that ethics need to change to reflect the material and environmental realities of today. This idea may be useful in modern society by taking a more collaborative approach to global challenges, where governments and humans understand their common duty to protect the earth and its residents.

In this light, the posthuman ethics proposed by Braidotti and the demand for "making kin" by Haraway are congruent. This form of kinship is not based on blood but on closeness, shared vulnerability, and responsibility.

This chapter has elaborated on posthuman ethics based on the work of Braidotti and Haraway, and challenged human-centered thinking and promoted coexistence. Interdependence is emphasized by Haraway's notions of "becoming-with" and "staying with the trouble", while subjectivity is redefined via responsibility and relationality in Braidotti's work.

Together, these points of view imply that, in order to live ethically in the modern world, people must acknowledge the interconnectedness of all life and dedicate themselves to a future in which all species coexist.

CHAPTER SIX

ANALYSIS OF *THE MADDADDAM TRILOGY*

In contemporary literature, nature is no longer the stable and harmonious entity humans once perceived it to be. In fact, in ecocritical studies, the concept of “nature” has been deconstructed, revealing its dark, monstrous, and unexpected side, which contrasts sharply with the traditional image of a singular, green, sunny nature that kept us happy all the time. This shift in perspective is not entirely new, as we can trace similar representations in literature, especially from the American Romantic literature to the gothic, where nature is depicted as a transcendental and idyllic space that evokes a sense of admiration to a fearful and unpredictable force; it shifts from a place people once turned to for spiritual solace and divine connection, to a dark and ominous setting associated with isolation, madness, and the presence of evil. In these later portrayals, nature no longer offers refuge but instead mirrors the chaos and darkness within the human psyche. Writers like Ralph Waldo Emerson and Henry David Thoreau romanticized nature as a realm of divine inspiration and self-reliance, highlighting its importance for society while overlooking its potential to unsettle, alienate, or even endanger the individual. Their works seldom acknowledge the darker, more chaotic dimensions of the environment that later gothic and contemporary writers bring to the forefront.

While earlier literary shifts reflected the evolving ways in which humans perceived and represented nature—ranging from the sublime and spiritual to the dark and chaotic—today’s context reveals a far more unsettling reality: nature is no longer merely reimagined but directly damaged and poisoned by human activity. Through climate change, pollution, and environmental disasters, the natural world has been contaminated and destabilized, turning into a toxic environment that no longer evokes transcendence or harmony, but rather decay, danger, and instability. This is particularly evident in urban settings, where marginalized communities often live in neighborhoods surrounded by waste and industrial byproducts, effectively turning human bodies into extensions of environmental toxicity. Yet, it is crucial to recognize that humans, their built environments, humanoid or other cultural structures cannot be viewed as separate from nature. Although there is an ongoing tension between

humanity and the natural world, we must remember that we are embedded within it—both shaping and being shaped by the (un)natural environments we inhabit.

Basically, posthuman studies seek to engage the ways in which humanity is being reconstituted through complex interrelations with technology, ecology, and non-human forms. Literature, and fiction in particular, represents an important site of discourse within this endeavor, since it offers a creative space in which taken-for-granted notions of the human can be interrogated and reimaged. The “cyborg” metaphor of Haraway and the Notion of “embodiment” concept of Hayles both question traditional humanism and believe in the function of literature as a medium of social transformation.

As Pramod Nayar (2014: 10) observes, literature “invented” the human being because it has repeatedly demonstrated human behavior, reactions, and interactions since the Middle Ages. This shift underlines how literature is increasingly used to oppose dominant anthropocentric discourses, showing its reflective posthuman conceptions. Fiction not only reflects changes in society but also takes part in restructuring the definitions of human.

Speculative and climate fiction provide a creative platform to examine posthumanism theory’s critique of anthropocentrism and call for a relational existence with technology and ecology. As Chakrabarty (2009: 206) argues, the inevitable climate change forces us to reassess human history from a global perspective, perceiving “humans as a geological force” rather than an independent actant. In this light, literature engages with posthumanism by showing how humans interact with their surrounding environment and systems, especially in climate fiction works.

A new literary subgenre addressing global warming and other environmental catastrophes is climate fiction, mostly known as cli-fi. It emphasizes the repercussions of human activities on the natural world and the complex web of links between the two. Mostly, cli-fi stories highlight the consequences of anthropocentric activities. While they portray dystopian futures in the aftermath of an environmental problem, they can also offer possible visions of harmonious coexistence.

This critical interpretation questions the anthropocentric assumptions that have traditionally placed humankind at the center of all things. It reveals that, in deconstructing this assumption of people being separate or superior from other

creatures, humanity is a product of the interconnected histories, cultural constructions, and ecological relationships. This perspective underlines how such research needs to be directed to explore how literature can underline such complexities, offering novel means of understanding the human experience within the wider web of life and technology. The literary works not only engage with posthumanist conceptions but also invite readers to reconsider humanity's connection with the nonhuman world in the Anthropocene.

Besides, the absence of “essential differences or absolute demarcations” undermines the traditional beliefs in the distinctiveness of human agency and purpose (Hayles, 1999). Posthumanism rethinks humans as into the much larger, relational schema where technologies, creatures, and surroundings co-evolve and interact. This change in thought has far-reaching implications for our understanding of identity, ethics, and agency within a world increasingly defined by technological integration. Far from being ivory tower theoretical school, these ideas have sunk very deep into the core of works such as those by Margaret Atwood where human and non-human agents interweave within the Anthropocene.

Depictions of the “post-human” envision a scenario where humanity is on the brink of extinction, leaving nature to exist and evolve freely. In Margaret Atwood’s *The MaddAddam Trilogy*, climate change, extinction of species, and the ecological degradation triggered by human activities are vividly described. It depicts a post-human landscape where genetically modified beings coexist with the remaining human survivors after a catastrophic event. This speculative future provokes contemplation on the ethical ramifications of genetic engineering and the prospect of new life forms emerging in a posthuman civilization. Starting her first book, *Oryx and Crake* in a post-apocalyptic world, it portrays the risks of biotechnology and the recklessness of human activity. Readers are introduced to a world that has been corrupted by technological enhancements and their being misused due to human greed. With the progress of applied sciences, humans have tried to control nature and the natural. With technological developments, new breeds of animals have been created, which have made humans think of themselves as superior over the natural and take the role of God.

Our narrator, Jimmy, after the disaster called Snowman, describes the pre-disaster world of his own and which ill behaviors have caused it, especially the scientific project Pigoon Project in which the artificially produced human organs could grow in special pigs and could be altered by utilizing cells from human donors and applied when needed. This project was thought to be cheaper than getting oneself cloned for spare parts. However, these hybrid animals destroyed the earth's balance. The artificial world that humans created for themselves estranged them from nature. Inevitably, humans had to face the consequences of this. By disregarding nature as a unique entity, humans have also disregarded the fact that they cannot exist without nature, that they are actually bound to nature. However, in the novel, we see humans thinking of themselves as superior to nature and exploiting natural resources like it will never have any fatal consequences. In the second book of the trilogy, in *The Year of Flood*, a religious environmentalist group—God's Gardeners—claims that man himself is the one who causes the destruction of nature.

Apart from genetically modified animals, there are also genetically modified human breeding in the laboratories. Glenn—later known as Crake—who thinks that humans are using technology for evil and their greed, produces a virus to annihilate human existence on the planet, and a genetically engineered group of new humans that would survive the virus could live in harmony with nature. These new human-like—but not bound to violence and evil human features—creatures, the Crackers, can live in cooperation with nature due to their being genetically close to nature. They can be regarded as representations of the posthuman in a way that they do not see themselves as superior to other species and maintain the highest level of harmony with the natural world. The Crackers are kind, understanding, curious, innocent, and a variety in color. The Crackers are free from jealousy, greed, and the need for animal protein, which, according to Glenn, are the reasons for all the “evil” in human beings.

In the trilogy, Crake could not accomplish his plans for eroding humankind from the planet so that it can be a better/safer place for his posthuman creatures and the nonhuman organisms. The human survivors of the disaster Jimmy, Ren, Toby, Zeb, Amanda, teach the Crackers the social and cultural knowledge and skills necessary to continue their existence; likewise, the Crackers teach the human survivors of the old world how to live with nature. Altogether, they are brought up as a hybrid kind of the

human they know how to live in happily together with nature and respect the natural life. Thanks to the hybrid Crackers, new hope emerges: Crackers can bridge the relationship between humans and nature and ultimately restore the balance.

In the twentieth century, the contemporary literature has expanded its angle to understand the ethical questions that came up with the creation of societies entangled with technological advancements: “[s]ome of the most lavish science fiction thought experiments are no longer merely fictions [...]. [W]e see glimpses of them on the technological horizon” (Schneider, 2009: 19).

6.1. BIO ENGINEERING AND EMERGENCE OF NEW SPECIES

The narrow scope of ‘what constitutes humanity’ within the confines of humanism plays a pivotal role in understanding the advent of ‘the posthuman turn’ (Braidotti, 2013: 16). According to Braidotti, this shift towards the posthuman is not a rejection of humanist principles but rather an opportunity to explore a more inclusive conception of identity (23). While humanism emphasizes the self-reliant individualism of the Enlightenment, posthumanism, in contrast, advocates for co-existence, the ethical responsibility for one’s actions, and an emphasis on caring for others.

Posthumanism, according to Rosi Braidotti (2013), places an emphasis on the fact that human bodies and identities are not static or independent but rather malleable, ever-changing, and intricately linked to one another. The bioengineered Crakers in Margaret Atwood’s trilogy serve as a complex representation of posthuman bodies, materiality, and interconnectedness, offering a profound exploration of the existential, ethical, and environmental concerns brought up by the Anthropocene and the biotechnological advances.

Braidotti’s conception of the posthuman body aligns with the Crakers, who represent not a static, idealized version of humanity but a malleable and adaptable body that is interwoven with the natural and technological environments. A rethinking of humanity is underway in the Anthropocene, according to Braidotti, since the human subject—long thought of as separate and independent—is increasingly interdependent on other kinds of life and technologies (2013: 2). The Crakers, created by Crake to eradicate human defects like pain, envy, and aggression, pose a challenge to the

humanist concept of the body as an independent, autonomous being. Rather, they represent a dynamic, interconnected way of existence that relates to Braidotti's conception of the posthuman as relational and woven into a web of life.

A primary concern in posthumanism is the criticism of the Cartesian mind-body duality derived from Enlightenment humanism. This duality, which prioritizes the intellect while sidelining the body, is profoundly entrenched in prevailing philosophical discourse. As Pepperell (2003) notes, there is "a commonly held belief that the brain determines or causes mental phenomena, in particular the phenomena of consciousness, with the consequence that in much philosophical discussion of consciousness the body and the world beyond are largely neglected" (13). Such a framework becomes increasingly problematic "due to its incompatibility with the globally-integrated, technologically-mediated mass network of humans, animals, and ecosystem that makes up our world." (Pierce, 2024: 2). By introducing posthuman beings that are genetically modified and characterized not just by cognition but also by their material embeddedness within ecological and biotechnological systems, Atwood challenges this disembodied humanism vision in the trilogy. Since Crake's interventions deprive the Crakers of their emotional complexity while also keeping them physiologically bound to the natural environment, they serve to illustrate the conflict between scientific redesign and embodied life. The posthuman body is emphasized throughout the trilogy as a form that is alive, situated, and materially responsive to its surroundings. This form challenges the philosophical theories of subjectivity that exclude matter and environment.

The first book of the trilogy, *Oryx and Crake*, centers around the scientific view of the world and the survivor's experiences in the post-apocalyptic world along with the new species. With the character Crake, an evolutionary scientist, the narrative explores the theme of playing God through the act of creation. Readers can trace this from Jimmy's judgmental words: "[t]here'd been a lot of fooling around in those days: create-an-animal was so much fun, said the guys doing it; it made you feel like God" (Atwood, 2004: 51). Crake's desire to control human evolution and create perfect human variants—immune to disease and able to live longer terms—echoes the mythic representations of God in many cultural narratives, where the creating is seen as a power. In his quest to engineer a new "superior" human race, Crake represents the

enlightenment ideals that favor the betterment of the human body by science and technology. Viewing this, readers start to question the rights and superiority of humans.

In the trilogy, Crake's creation of a severely modified body devoid of what are often seen as human defects—pain, jealousy, and violence—Crake's design provides a challenge to posthuman ethics. By trying to bioengineer a new and “improved” species that can survive in a post-apocalyptic world while being disease-proof, jealousy-free, and optimized for maximum survival, Crake pushes the limits of what is considered natural and artificial. The bioengineered bodies of Crakers indicate how posthuman creatures might overcome human constraints. However, the moral dilemma emerges when we think about whether Crake is manipulating these bodies to control them or to improve them. From Braidotti's critical posthumanist perspective, the bioengineered body raises questions about the embodiment of technology and to what extent humans are in control of manipulating life. She critiques the traditional and anthropocentric view of the body as a human-centered and individualistic concept. There is an urgent need for a new way of combining self-interests with the well-being of an enlarged community, based on environmental inter-connections (Braidotti, 2013: 48). According to her view, the posthuman body is not something static and independent but rather something that is always open to change and in interaction with other bodies, places and technology.

The need to transcend the constraints of being human, including physical and mental ageing, emotional turmoil, and death, motivates Crake's bioengineering process. Posthuman ethics emphasize that there should be more than just optimizing and controlling the body. Instead of seeking to create a “superior” human or posthuman, Braidotti (2013) argues that posthuman ethics should focus on redefining humanity and celebrating progress rather than perfection. She further critiques the enlightenment ideals that value the human as independent and sovereign entity, and instead proposes a positive posthumanism that prioritizes interactions, interconnectedness and harmonious survival (2013: 12).

The view of posthuman ethics is called into question by the Crakers, who are created to be flawless, self-sufficient creatures. They are still shaped by human values and limitations, so posing the question: Can a bioengineered body ever truly embody

posthuman ethics if it is shaped by human desires and fantasies of dominion over nature? We can argue that Crake's attempt to reach perfection fails because it did not take into account the fluidity and complexity of becoming. In the beginning, when we are introduced to Crakers for the first time from the narrative of Snowman, it is obvious that though they are designed for perfection, they lack the self-awareness and agency that allow for true posthuman evolution. Instead of embracing the ongoing process of self-discovery that posthumanism promotes, they seem to be locked at a fixed destiny. However, this situation will be changing through the storyline, along with the narrative and storytelling, which will be discussed in the following section focusing on agency.

Before continuing with the physical traits of the Crakers, the ethical and relational dimensions of Haraway's posthumanism helps deepen the critique of Crake's engineering approach. In light of the Crakers' design, adaptation to the environment viewpoint is essential, which can be related to Donna Haraway's "staying with the trouble" and "making kin" concepts. Crake's idealistic vision of mankind fails to take into account the complexity and roughness of real life, which Haraway stresses is essential. In her piece "staying with the trouble," Haraway (2016) urges readers to face life's unknowns head-on, whether they be the ethical questions raised by biotechnology or the complex dynamics between humans and other species.

Aiming to eliminate complexity and unpredictability, the Crakers' designed bodies and reduced emotional and social frameworks symbolize an effort to evade the "trouble" of human life. However, the fact that they cannot feel love or envy shows how limited Crake's view is and how important it is to embrace the relational, interrelated parts of life that Haraway promotes. Instead of trying to control or perfect non-human species, Haraway's idea of "making kin" encourages us to realize the interconnections and entanglements that exist between ourselves and them, thereby providing an alternative to Crake's engineering approach. The Crakers pose a threat to this relational ethical framework because they value control and efficiency more than the intricacies of kinship.

From this point, a closer look into the Crakers' engineered physiology reveals how deeply their bodily functions have been shaped to eliminate conflict and complexity, but at the expense of their emotional depth. Crakers are bioengineered beings modeled on selective traits observed in animals, embodying an idealized

synthesis of biological efficiency and environmental adaptability. As Sebastian observes, “Crakers are an amalgamation of pre-selected animal characteristics” (4), deliberately assembled to function in harmony with the nature. Atwood herself refers them as “clever primates” (Interview by Case & McDonald, 2003) emphasizing their evolutionary continuity with nonhuman species while simultaneously marking a departure from traditional human traits. They are like a collection of all necessary qualities collected from different animals to achieve the best version of human that can survive and adapt to the environment.

According to Giovannelli, “Supposed to repopulate the Earth, the Crakers must remain firmly anchored to a state of innocence This is why Crake makes sure that his girlfriend Oryx and, later on, Jimmy, might take care of them and monitor their mental growth by means of suitable explanations and origin stories” (2022: 302). Encoded with a hybrid genetic structure that merges elements of both human and animal DNA, the Crakers are intentionally designed as a biologically sustainable species. This notion refers to bodies that are both individual and collective, biologically distinct yet ecologically entangled. Male Crakers have a morning ritual that they draw invisible borders to their territory by peeing like dogs, as stated in the story: “[t]he men do this twice a day, as they’ve been taught: it’s necessary to keep the volume constant, the odour renewed. Crake’s model had been the canids and the mustelids, and a couple of other families and species as well” (Atwood, 2004: 154). They have durable bodies, but they might have little cuts and bruises, and when they do, some others come and purr on their wound to make them heal fast, like the cat family. Crake designed them carefully upon his discovery that “the cat family purred at the same frequency as the ultrasound used on bone fractures and skin lesions and were thus equipped with their own self-healing mechanism” (156). Moreover, they have a special smell, so with the help of their special odor, they are insect repellent. The Crakers babies are designed to grow fast, not like traditional human babies. Crake designed them with the idea that the time could be used efficiently if the children grew faster, Snowman describes as follows: “[t]he yearling looks like a five-year-old. By the age of four he’ll be an adolescent. Far too much time was wasted in childrearing, Crake used to say. [...] No other species used up sixteen years that way” (158). Furthermore, their sexuality is totally different than humans. Female Crakers give off a smell when they are ready for

mating, and their bellies turn blue. It is visible, so there are no surprise and unrequited love issues between them. When they are blue, the flirting starts; males give flowers to females, and they sing and dance together. As echoed in Crakes ideas, “[t]hink of an adaptation, any adaptation, and some animal somewhere will have thought of it first”, this feature must be modeled after the mating dance of crabs—“the sexual semaphoring of crabs” (165). Also, sexuality is not a taboo for them. In human societies, because of sexuality, there are many conflicts, and this causes pain, but in Crake’s version of society, there will be “no more prostitution, no sexual abuse of children, no haggling over the price, no pimps, no sex slaves” (165). Crake has eliminated these possibilities of jealousy and rivalry by making sexuality as an easy process: “[t]heir sexuality was not a constant torment to them, not a cloud of turbulent hormones: they came into heat at regular intervals, as did most mammals other than man” (305). Children of Crake have the ability to digest raw vegetables and fruits better. They do not need animal protein, and “they ate nothing but leaves and grass and roots and a berry or two; thus their foods were plentiful and always available” (305). This prevents fights and disagreements between them. Moreover, Crakers would have no concept of familial devotion, or exclusive sexual relationships:

As there would never be anything for these people to inherit, there would be no family trees, no marriages, and no divorces. They were perfectly adjusted to their habitat, so they would never have to create houses tools weapons, or, for that matter, clothing. They would not need to invent any harmful symbolisms, such as kingdoms, icons, gods, or money. (Atwood, 2004: 305)

The habit of refraining from meat consumption by both the Crakers and God’s Gardeners exemplifies a posthuman mode of coexistence founded not just on nonviolence but also on an embodied ethic of restraint. The Crakers’ discomfort with deceased animal remnants, termed as “smelly bones,” indicates a distaste for predation and a respect for non-human life. Similarly, the Gardeners’ plant-based diets reflect their deep ecological spirituality and commitment to non-harm. In this context, food becomes a moral and relational act—what is eaten and what is refused to be eaten both signify an orientation toward multispecies kinship. As Sarah Sceats (2000) observes, “[t]his resistance is effected through political engagement of the most basic (and food-related) kind. It suggests a connectedness that opposes social fragmentation and allays both individual and cultural yearnings for completion” (7). Thus, the body itself becomes a site where ethical cohabitation is enacted.

In addition, Paradise Project and BlyssPluss Pill were designs of masterminds, as Crake states:

“[w]hat once-unimaginable things had been accomplished by the team here. What had been altered was nothing less than the ancient primate brain. Gone were its destructive features, the features responsible for the world’s current illnesses. For instance, racism [...] had been eliminated [...] mechanism [...]. Hierarchy could not exist among them, because they lacked the neural complexes that would have created it. Since they were neither hunters nor agriculturalists hungry for land, there was no territoriality: the king-of-the-castle hard-wiring that had plagued humanity had, in them, been unwired” (2004: 305).

The Crakers represent the ideal version of the eradication of human flaws, but at the same time, they lack fundamental aspects of human experience, such as emotional complexity or cultural constructs. Because of this, one can wonder whether they represent a perfect human form or if they exclude features that are fundamental to being human. While their design eliminates biological weaknesses and emotional suffering, it also removes the complex and unpredictable components of human nature. Their lack of emotional depth or cultural constructs might suggest that an ideal posthuman is not necessarily physically better, it merely symbolizes a new way of existence, which values biological efficiency over the intricacies of human connections, awareness, and identity. This tension becomes even more apparent when considering the ideological basis of Crake’s vision. Crake’s vision presents an idealized, mechanized picture of humanity, yet it might also point the problems of attempting to “perfect” human nature by ignoring the fundamental human traits. Crake’s biotechnological project in *MaddAddam* presents a very different understanding of the posthuman body. Instead of using science and technology to improve human life, Crake uses them to erase humanity as it is known. He removes language, religion, sexuality, and culture from the beings he creates. As Marks de Marques (2015) states, “[o]ne common ground both philosophical fields advocate is that science and technology should be used to ameliorate human existence through our relationship to them.” (138). However, Crake breaks from this idea. His project “uses bioengineering to destroy humans and science, reverting humans (which is, essentially, what Crakers are, based on their genome) to a pre-human status [...] if, according to Crake, culture is what makes us human.” (139). In this view, the Crakers are not advanced humans—they are simplified bodies without memory, history, or complexity.

In the first book of the trilogy, in *Oryx and Crake* (2004), Atwood presents a future that has been corrupted by technological enhancements and their being misused due to human greed. With the signs of progress in applied sciences, humans could create a problem over nature and the natural. The technological developments that enabled the creation of hybrid/ new breeds of animals, such as Pigoons, designed to cultivate human organs- are a prime example of humanity's hubristic overreach. As humans began to see themselves not as caretakers of the Earth but as Gods, capable of dictating the course of existence. They invented artificial forms of life in the projects, which aimed "to grow an assortment of human-tissue organs in a transgenic knockout pig host" (Atwood, 2004: 22). To avoid expensive and morally problematic human cloning, the project's disturbingly simple logic was to grow human organs inside pigs to provide spare parts. This was a huge step forward, a cheap fix for the problems caused by the human body's inherent limits, according to the people in charge of the project. However, it is also ironic that these very advancements are the same things that will eventually lead to a disaster in the story. Transhumanist philosophy, which Atwood's story compels us to approach critically, often disregards the larger ecological and moral ramifications of tampering with nature. Despite its attractiveness, the concept of improving human capacities via technology and genetic engineering reveals the folly of human uniqueness. The Pigoon Project highlights the basic mistake of seeing nature as something to be controlled, monetized, and exploited, even if it seems like a practical answer at first glance. Ecological collapse results from the disruption of delicate ecosystem balance brought about by the creation of hybrid creatures, who blur the boundaries between species and artificially improve life. Without acknowledging the interdependence that ties people to the environment, Atwood criticizes the human ambition to control nature and use its resources as if they were infinitely accessible. It is hinted that as a species, we will face the disastrous results of our own arrogance as a result of our disconnection from the natural world. This dynamic is unfair to the Earth's life-supporting systems since it reduces nature to a commodity for human profiteering. Humans are bound to nature. Humans thinking of themselves as superior to nature and using the natural resources as an unvoiced fruitful victim of their oppression, can be read as an unjust action towards nature.

Crakers have a thick and durable skin even to ultraviolet light, whereas human skin is sensitive to excessive sunlight; Snowman feels the need to protect his body from sunlight especially in the midday. Around noon, Snowman has to pull back into the forest, under trees, due to the “evil rays bounce off the water and get at him even if he’s protected from the sky, and then he reddens and blisters” (Atwood: 2004, 37). In spite of their bioengineered perfection and supposed independence from human constraints, the Crakers’ bodies are inherently dependent on both their makers and the environment. In line with Braidotti’s posthuman ethics, which seek to de-emphasize human uniqueness and instead see bodies as embodied subjects in dialogue with other beings. When it comes to the Crakers, it was all because of Crake’s goal of dominion over nature that they were so emotionally and physically simple. Bioengineering of Crake eliminates many negative human traits like aggression, jealousy, and competitiveness, but also gets rid of complexity, vulnerability, and uniqueness. Recognizing the inherent fragility and interconnection of all living entities, Braidotti (2013, 140) hints that posthuman ethics necessitates an acceptance of the complexity of bodies and identities. The Crakers may seem flawless and unbreakable on the outside, but they are missing the nuance that comes from experience—the very aspects that contribute to a rich and valuable existence. The effort to define what is “better” or “perfect” raises ethical concerns, since it simplifies life too much, particularly by ignoring the agency and emotional depth that accompany human imperfections.

In the trilogy, Crake reimagines the human body in a way that goes beyond only eradicating sickness and aging. Biologically, he also alters social behavior and cultural constructions. The Crakers are portrayed as creatures who have perfected their physical form, liberated from the shackles of psychological aggression, socioeconomic disparity, and environmental degradation. Their polygamous reproductive system and herbivorous lifestyle put an end to possessiveness, jealousy, and scarcity. “They were neither hunters nor agriculturalists hungry for land, there was no territoriality... They ate nothing but leaves and grass and roots and a berry or two; thus, their foods were plentiful and always available” (Atwood, 2004: 305). These material traits—embodied in the design of their metabolism, instincts, and communal behavior—are crucial to Crake’s vision of a peaceful species. As Yoo (2021) points out, they “herald a utopian posthuman future, one which will repair the damage of contemporary social reality,

including environmental catastrophes, global wars, and natural disasters” (622). Thus, the Crakers serve as both genetically altered bodies and story vehicles for envisioning a more ethical and long-term social order apart from human corporeality.

The idea of interdependence and cohabitation of several species is another important part of Braidotti’s posthuman ethics, which underscores the necessity for both humans and non-humans to adapt and cooperate in order to maintain mutual survival. In the trilogy, the possibility of a future where human and non-human bodies grow together is foreshadowed at through the hybrid offspring from human-Craker partnerships at the conclusion of the trilogy. According to Braidotti’s posthumanist ideas, the ability to adapt, interact, and reciprocally impact other things will define the destiny of the posthuman body, seen as a form of ethical becoming. The elimination of artificial barriers between biological and technical realms, as well as between humans and non-humans, is central to Braidotti’s ethical posthumanism. She firmly believes in decentering the human person and the ethical requirement to accept connectivity across all forms of life, and readers can trace her views on hybrid creatures and the process of multispecies living in *The MaddAddam Trilogy*. Rather than dominating, the narrative depicts the Crakers’ existence as manufactured beings—bringing about mutual survival via their creation to live in harmony with nature. The bond between the Crakers and the human survivors exemplifies Braidotti’s concept of a world where all life is interdependent and linked; according to posthuman ethics, we must challenge the idea of human exceptionalism and find ways to live alongside non-human beings while honoring their autonomy (Braidotti, 2013: 141).

Donna Haraway’s concept of “becoming-with” further deepens this understanding, people need to figure out how to coexist in a shared biosphere not only with other people, but also with non-human creatures. A “possible reconfiguring of the way we exist on this planet in the present” is what Haraway suggests, in which the lines between humans and other species become more porous so that they may all hopefully survive. Paralleling Braidotti’s call for decentering human, Haraway argues that we should see human bodies not as independent entities but as interdependent nodes in a complex network.

Thus, a major ethical problem is brought to light in Atwood’s novel: the fallacy of human superiority, which causes people and communities to fail to see how all life

is interdependent on one another. A powerful cautionary tale about the perils of unbridled technological progress, this trilogy is a warning about the way technology is changing our lives and should make us reevaluate humanity's role in the environment.

6.2. RELIGIOUS PERSPECTIVES ON THE POSTHUMAN

In the opening chapter of the third book of the trilogy, the creation of Crakers is framed within a mythological context, establishing a religious-like narrative. Crake, the architect of the new species, is presented as a godlike figure who has the power to create and annihilate life. His role transcends that of a mere scientist, positioning him as a creator of new humanity, attached with divine qualities. The mystic framing is further reinforced through the narrative rituals performed by Toby, who, as Giovannelli (2022) notes, becomes “an active weaver of post-pandemic web” by delivering “Story of the Egg”- a Genesis-like tale told in simplified language to the Crakers (306).

Crake's creation of the Crakers is not only an act of genetic manipulation but also a symbolic representation of divine intervention. The Crakers are conceived behind an “eggshell”, a motif symbolic of sacred images like the womb of God or the holy vessel of salvation. This protective shell separates them from the “chaos” of the outside world, which saves them from the evils of existing humans, according to Crake's view. The chaos is the embodiment of the disorder that he believes humans have caused on Earth with their misbehaviors. Within the eggshell, however, a new world is born—a peaceful and harmonious environment, unharmed by the sins of the past. As Giovannelli also reads this “Great Rearrangement,” attributed to “good, kind crake” by the Crakers themselves, as a reordering of the world that echoes religious renewal through destruction—blending divine mythology with radical biopolitical power (306).

This mythologizing of creation is further elaborated by Izabela Poreba (2023) who points out that there are two narratives about Craker's origin: “One is a Genesis myth that post-humans want to learn [...] the other is the story of the apocalypse narrated from Snowman's perspective.” (197). Although the human characters possess

knowledge of both narratives, she contends “the Crakers learn their Genesis only in the form of a myth,” which starts with “the Egg in which Crake created new humans, separating them from Chaos with a safe shell.” (197). According to this myth, “Chaos was everything outside the Egg, all the evil done by humans to other beings—human, animal, earth” (197–198). This idea internalized by the Crakers, not only conceals the brutal scientific truth of their origin but also exalts Crake to a God-like figure in their worldview.

A different approach to considering Crake’s plan to wipe humans off the surface of the Earth is as a kind of selfless love, in which he wants to preserve his creation by removing the wicked humanity, much as a deity would do for his people. Despite his violent actions, his acts are driven by a desire to protect and nurture the new species, since he feels that mankind has been unsuccessful.

Crake’s scientific ambition, driven by a desire for advancement, is concurrently overshadowed by significant existential loss- a conflict that culminates in what Harland (2016) refers to as “ecological grief” and “a lament for a species” (587-589). Yet within this mourning lies a glimmer of speculative regeneration: the emergence of a genetically reimagined posthuman species, envisioned not merely as a product of science but as a radical alternative to humankind and the failures of anthropocentric evolution.

In this ambiguous context, Laura Giovannelli (2022) presents a critical viewpoint that highlights the ethical inconsistencies inherent in Crake’s utopian endeavor. She contends that, while Crake imagines “innocent, peaceful, and herbivorous replacements for humanity,” their emergence is facilitated only by what she describes as an act of extensive “bioterrorism” (301). Giovannelli highlights the “semantic field of despair and its dreadful outcomes,” reframing the birth of the Crakers not as an innocent break from the past, but as a result of devastation disguised as renewal (301). Her analysis promotes a more prudent and morally involved comprehension of posthuman potential—one that refrains from praising technological innovation without recognizing its violent underpinnings. In this context, the Crakers are inextricably linked to the tragic past they have inherited. Although intended to be tranquil and egalitarian, they originate from a unilateral perspective that disregards consent, complexity, and the possibility of co-evolution. This viewpoint allows for a

crucial examination of both Crake's godlike role as creator and the foundational beliefs behind scientific utopianism.

The "Paradice" project itself is a reference to Edenic imagery (Sebastian, 2024: 4). As Snyder explains, "the new Adams and Eves were kept in an enforced state of innocence, cordoned off from all knowledge deemed by their human maker to be confusing, risky, or otherwise contaminating" (475). Oryx instructs the Crakers "what not to eat and what could bite. And what not to hurt" (Atwood, 2004: 309), therefore even their ethical framework is set outside. This raises questions about autonomy and moral agency: are posthuman entities capable of free will and moral choice, or is their innocence a consequence of carefully controlled exposure rather than an inherent quality?

Furthermore, the fact that Jimmy is selected by Crake to protect his creations further highlights the role's religious connections. Jimmy is given the responsibility of caring for the Crakers and leading them into the future, much like a prophetic figure. This decision emphasizes the idea of a designated guardian, someone defined by destiny or divine intervention, and it further establishes Crake as a deity in the story. Thus, as they explore the remnants of human history and the creator's heritage, the Craker's journey is both a biological and a spiritual progression.

While Crake embodies a secular god-creator figure, the narrative shifts in *Year of the Flood* to a more theologically structured eco-faith movement that offers a spiritual alternative: the God's Gardeners. God's Gardeners is an eco-activist group that tries to maintain a sustainable life and advocates for environmental conservation. The group seeks to connect humans with nonhuman entities, emphasizing the recognition of the value and significance of all entities. A central message is the inclination of humans to regard even the smallest creatures that inhabit our world with disdain. However, the group asserts that the existence of humanity is contingent upon these smaller organisms. All life forms and the ecosystems that support them are creations of the divine and must therefore be protected and respected.

In their worldview, the greedy humans are depicted as destroyers of God's beautiful garden and reckless harmers of the delicate balance of nature. The group's mission is to protect the garden and preserve the world in its original and divinely ordained condition, as stated in Adam One's words: "[h]ow much have we lost, dear

Fellow Mammals and Fellow Mortals! How much have we wilfully destroyed! How much do we need to restore, within ourselves!” (Atwood, 2010: 15). In the Oral Hymnbook of the God’s Gardeners, there are various hymn texts that signify how they really wished for a kind of salvation:

*[...]Oh Creatures dear, that suffer here,
How may we Love restore?
We’ll Name you in our inner Hearts,
And call you Friend once more. (16)*

They are fighting for the presence of ecological balance and opposing animal killings if not necessary, as Adam One always warns others that all animals are “God’s creatures. Never kill without just cause” (21).

This reverence is also reflected in Adam one’s personal transformation, which becomes a cornerstone of the groups’ ideology. Adam One endeavors to extend his influence beyond his immediate group, striving to enlighten others by sharing the transformation he underwent: “I, too, was once a materialistic, atheistic meat-eater. Like you, I thought Man was the measure of all things” (Atwood, 2010: 48). He further elaborates on the pivotal moment of his own enlightenment, recounting how, while indulging in burgers at SecretBurger, he was struck by a profound revelation. In his account, he describes hearing a mighty voice declare, “spare your fellow Creatures! Do not eat anything with a face! Do not kill your own Soul!” (48). Following that awakening, he renounced meat, and upon joining the God’s Gardeners community, he and everyone made a solemn vow never to partake in the consumption of flesh again. This act symbolizes a deep respect for all life, marking not only the decentering of humanity within the natural order but also the dethroning of humans from the apex of the food chain—a perspective that aligns with the posthumanist critique of anthropocentrism.

As Adam One articulates, humanity was originally “blessed and ordered to increase and multiply, and to replenish the Earth” (Atwood, 2010: 63). However, he underscores a grave misinterpretation of this divine mandate—one driven by human greed: “why do we think that everything on Earth belongs to us, while in reality we belong to Everthing? We have betrayed the trust of the Animals, and defiled our sacred task of stewardship” (63). He challenges the anthropocentric view that humans have historically held, questioning why we have so arrogantly assumed dominion over the

Earth, while, in truth, we are merely one part of the vast web of life. Adam One laments, “God’s commandment to ‘replenish the Earth’ did not mean we should fill it to overflowing with ourselves, thus wiping out everything else. How many other Species have we already annihilated?” (63). This statement reflects a critique of humanity’s unbridled expansion, which has led to the destruction of countless other life forms.

In his reflection, Adam One also acknowledges the deep interconnection between humans and all other creature: “We thank Thee, oh God, for having made us in such a way as to remind us, not only of our less than Angelic being, but also of the knots of DNA and RNA that ties us to our many fellow Creatures” (Atwood, 2010: 64). This recognition of the biological bond between humans and non-humans counters the centuries-old belief in human superiority over the nature. He goes on to implore humility in the hymn: “Oh let me not be proud, dear Lord, nor rank myself above, [...] let us not scorn our lowly birth, nor yet our Primate seed” (65). Here, Adam One highlights the fallacy of human exceptionalism—a notion that has historically led to the subjugation of other species. The final plea in the hymn is a stark reminder of the prideful arrogance that has often led humanity to place itself above all other creatures, falling victim to a hierarchical worldview. This unjust dismissal of non-human lives underscores the need for a radical shift in our ethical perspective—one that recognizes humans as part of a larger, interconnected community rather than as its dominant force.

Yet, despite their ecological awareness, the God’s Gardeners’ framework remains entangled with a fundamentally anthropocentric worldview. This viewpoint resonates with posthumanist framework, notably in its critique of human exceptionalism and its emphasis on the interconnectedness of all forms of existence. However, the religious underpinnings of the group complicate this perspective. Despite advocating for environmental protection, their approach remains inherently anthropocentric, centered on humanity’s relationship with God, and neglects the recognition of non-human entities as beings with intrinsic importance independent of human requirements.

The God’s Gardeners’ approach to nature and its ingredients as “given for the service of humanity” and to be “protected well” can be seen as a direct reflection of traditional humanist ideas. Their religious perspective underscores the belief that God

has endowed nature as a means to alleviate human suffering, with all natural elements seen as divinely ordained tools for human benefit. This framing of environmental stewardship, while well-intentioned, still retains a fundamentally human-centered ethos. The activists promote the protection of the natural world by highlighting gratitude for resources that nature *offers* to humanity. This initiative to cultivate respect for nature via the perspective of divine creation poses a challenge to posthumanist theory, which seeks to decenter humanity and honor the autonomy of non-human entities. Posthumanist thought views nature not as a mere resource to be exploited, but as a dynamic, interconnected system in which humans are but one participant among many. The insistence on human-centered stewardship, even when framed in religious terms, fails to fully acknowledge the agency of non-human entities and perpetuates an anthropocentric view that places humans at the center of ecological relationships.

Consequently, while the group's efforts to protect the environment align with certain posthumanist ideals—such as fostering a respect for the natural world—their religious framework ultimately prevents them from embracing a truly posthumanist philosophy. Instead of viewing nature as a realm with intrinsic value deserving of respect in its own right, they regard it as a divine gift to be preserved for human use; they wish “the world to be healed so life wouldn't die out completely” (Atwood, 2010: 79). This limitation undermines the potential for a more inclusive and egalitarian understanding of the natural world, where human beings are seen as co-evolving with other life forms, rather than as the ultimate stewards of life on Earth.

6.3. CHALLENGING HUMAN-CENTERED STORYTELLING: NON-HUMAN AGENCY

The posthuman shift in Atwood's trilogy challenges the human-centered narrative framework of conventional storytelling, which places an emphasis on the human experience as the primary catalyst for transformation and significance. Readers can explore the narratives of the trilogy initially framed through human perspectives (for example, Snowman/Jimmy), but progressively the non-human entities like Crakers and even the virus have been given voice. By casting doubt on the limits of

who or what can recount the world's history, this shift in perspective makes conventional storytelling more challenging.

As Iovino and Oppermann note, matter is not passive background but an active, storied participant in the world's becoming. "All matter is storied matter," they argue, capable of generating narratives and meanings beyond human intervention (2014: 1). The Crakers display a kind of material agency while being designed to behave in a specific way. Beyond basic biological reactions, their behaviors—especially with regard to their social routines and interactions—represent the intricacy of being a part of the world, even in a posthuman state. Although the Crakers' emotional autonomy is diminished due to Crake's influence over their design, they are still considered agents in their own right. From their mating rituals to their wound-healing techniques, they can influence and shape their environment. Even while the Crakers are creations of Crake, they manage to exert agency via their interactions with the world around them and with one another, as Barad's agential realism might highlight. Even without human-level empathy, they shape their environment and evolve in ways that demonstrate decentralized agency. This provides further evidence that agency is present in all things, not just humans, even artificially manufactured ones. Their physical activities and ecological sensitivity demonstrate the matter's embedded narratives, which unfold "within and beyond the human realm" (Iovino and Oppermann, 2014: 1).

New species, such as Crakers, also show alternative forms of agency and the possibility of ethical responsibility by highlighting the interdependence of all entities. For example, Toby teaches writing to a Craker called Blackbeard, in turn Blackbeard teaches Toby to understand natural life and the nature of pigoons. Through the end of the narrative, readers come to conclusion of the importance of mutual becoming, where humans and new life forms evolve together to survive and adapt to new circumstances. Several of the women survivors become pregnant by the Crakers and the hybrid children are to be born. Even the ending of the narrative signals that Blackbeard who learned writing from human, will continue storytelling – writing down the stories of Oryx, Crake, Jimmy, Toby and Zeb. By shifting to non-human storytelling, Atwood engages with a posthuman storytelling framework, where non-humans are not merely passive recipients of human action but active participants in the process of collective

memory, history and survival. In the beginning of the narrative, the storytelling activity was assumed by a human survivor Snowman, to pass the history and collective knowledge to the future generations, but at the end we can understand that one of the Crackers—Blackbeard—will be continuing to pass the collective history to the future generations. In other words, Blackbeard takes on the role of passing down collective knowledge, highlighting the ethical responsibility of non-humans to engage with the world's history. Following the death of Snowman and Toby, Blackbeard takes authority as the custodian of “both oral and written traditions” (Giovannelli, 2022: 307). This also symbolizes the collapse of human exceptionalism and opens a new type of narrative. He tries to establish a “Craker mythology” by asserting “the celebrant's role”, formerly held by his human agents (307). The acceptance of responsibility for knowledge and history by the Crackers challenges the human-dominated paradigm of historical continuity, rather than the other way around. When non-human bodies and viewpoints are given equal agency, as the Crackers do, they usher in a new era of narrative and interpretation. This narrative transfer from a human (Snowman) to a Craker (Blackbeard) exemplifies what Oppermann refer to as “narrative agency”, in which even nonhuman or hybrid entities become legitimate conveyors of collective memory (2016: 30).

6.3.1. The Virus as Semiotic Actor and Ecological Agent

The human-made virus, carried by *BlyssPluss Pills*, which Crake created with the grand vision of achieving superhuman and immortality, exemplifies the concept of agency in material ecocriticism. Not only The Crackers but also virus itself can be seen as non-human agents in the narrative, which not only shape events but also tell a story of their own. In his pursuit of perfection, Crake's activity ultimately led to a viral outbreak and initiated a catastrophic situation. Interestingly, Crake's initiation to transcend human body's limitations and create better version of humans ended up creating the end of its own creator along with the majority of the human population. This concept aligns with Bruno Latour's (1993) “Actor Network Theory”, which posits there is no obvious distinction between active and passive agents, as in subjects and

objects. According to the theory, all entities, whether human or non-human, have an agency and they possess the capacity to create impact or affect other entities.

In this context, the virus itself becomes an example of a “semiotic actor” (Haraway, 1991). Its ability to infect humans, making them ill and in turn, altering the course of their existence underscores its role as an agent capable of exerting influence in the environment (Barad, 2007). By doing so, it embodies the notion of material agency, showing that even non-human entities or inanimate objects can possess the ability to act and impact the world surrounding them. This interpretation of agency aligns with the ideas put forth by theorists such as Karen Barad, Bruno Latour, and Donna Haraway – who argue that agency is distributed across all entities and every element of the environment has a role to influence the other ones. Barad’s agential realism challenges the conventional understanding of subject-object relationships and suggests that they are co-constitutive (2007: 137). Similarly, Latour’s theory emphasizes the interconnectedness of entities in an ecology, in which humans and nonhuman actors are equally capable of influencing one another (1993: 371). Haraway’s concept of “making kin” and her ideas on multispecies living further contribute to this understanding of agency (2015: 162). Human and nonhuman forms are entangled in complex but interrelated relationships that allow for mutual impact. Thus, Crake’s creation’s destructive activity exemplifies how agency is not an action limited to humans or traditional actors, but it is distributed across all entities—even viruses, which are capable of influencing the organisms in an unforeseen way.

The BlyssPluss Pill intended to “take a set of givens, namely the nature of human nature, and steer these givens in a more beneficial direction than the ones hitherto taken” (Atwood, 2004: 293). The aims of this development were protection from sexually transmitted diseases, a boundless supply of libido and sexual strength “coupled with general sense of energy and well-being, thus reducing the frustration and blocked testosterone that led to jealousy and violence, and eliminating feelings of low self-worth”, and eternal youth (294). According to Crake, these three qualities will be the deceiving ones, since the fourth quality of the pill—birth control—will never be advertised. Crake states: “such a pill [...] would confer large-scale benefits, not only on individual users [...] but on society as a whole; and not only on society but on the planet” (294). When Crake is criticized by Jimmy, he defends himself by these words:

“demand for resources has exceeded supply for decades in marginal geopolitical areas, hence the famines and droughts; but very soon, demand is going to exceed supply for everyone. With the BlyssPluss Pill the human race will have a better chance of [survival]” (295). In the Anthropocene, the BlyssPluss Pill and the Crakers represent the concept of unintended consequences, highlighting how agency is not limited to intention but emerges through entangled intra-actions.

6.3.2. The Rise of a Posthuman Narrative Voice

Throughout the trilogy, a narrative change becomes evident. The story, which begins from a human perspective, gradually evolves into a posthuman one, culminating in the narration being overtaken by one of the Crakers. Blackbeard, after learning how to write, begins to share stories not only orally with the children but also in written form, preserving the information for future generations. As Blackbeard proudly states, “I am Blackbeard, and this is my voice that I am writing down to help Toby. If you look at this writing I have made, you can hear me (I am Blackbeard) talking to you, inside your head.” (Atwood, 2014: 457).

Blackbeard finally gives us his own perspective as he describes the joint struggle of the Pig Ones, human survivors, and Crakers against the remaining violent humans from the Chaos. He narrates everything to the group, including his fears and worries, by saying these words: “[a]nd I was in very much trouble too, [...] and I felt a very bad feeling, and I was frightened. [...] And I cried, because they were dead ones, very dead ones” (Atwood, 2014: 438). Even admitting that he “cried”—an emotion that, despite being excluded from their original design, Crakers gradually begin to develop through experience and interaction with others. Toward the end of the novel, the voice we hear belongs to Blackbeard, who is now keeping a journal. He describes how Toby taught him to write and express himself, “[...] she showed me, how to make such words, on a page, with a pen, when I was little. [...] she showed me how to turn the marks back into a voice, so that when I look at the page and read the words, it’s Toby’s voice that I hear. And when I speak these words out loud, you too are hearing Toby’s voice” (468). This signals the emergence of a new posthuman narrator and a fully realized narrative agency that has shifted beyond the human.

According to Iovino and Oppermann (2014), narrative agency also emerges through rituals, gestures, and symbolic modes of meaning making in material forms. The Crakers' developing religious rituals exemplify this concept of narrative embodiment. The Crakers begin the formation of an independent belief system. They engage with abstract and symbolic reasoning in their efforts to comprehend their environment. Despite Crake's initial intention for them to be devoid of abstraction and symbolic thinking, they eventually develop a kind of religion of their own. Human survivors can view that how the Crakers can diverge from "the geneticist's planned course and familiarise with an epistemology coterminous with symbolic thinking and theological beliefs, cosmogonical visions and written codes, *mythos* as well as *logos*" (Giovannelli, 2022: 305). For the Crakers, Crake is the creator, Oryx is the goddess of animals, and Snowman is the prophet and guide. The Crakers often express gratitude to Oryx and engage in singing as a means of communication with her and Crake. When they think they cause harm to nature or any component of nature, they apologize for this wrong behavior and perform some kind of communion with Oryx. Snowman says, "Crake thought he'd done away with all that, eliminated what he called the G-spot in the brain. God is a cluster of neurons." (Atwood, 2004: 157). However, no matter how hard Crake tried to eliminate notion of religion/abstract belief, "[...] they're conversing with the invisible, they've developed reverence" (157). Even in the previous times, Crake warned Jimmy by uttering these words, "Watch out for art. [...] As soon as they start doing art, we're in trouble", "since symbolic thinking of any kind would signal downfall" according to Crake (361). Ironically, the symbolic structures Crake wished to suppress become the very means through which Crakers navigate ethical behavior and relationality. So, Crake was wrong; their being able to develop symbolic thinking enabled them to comprehend their surroundings better and adapt to the natural world and life with human survivors. Their songs, apologies to nature, and reverence for Oryx all serve as posthuman rituals of care and cohabitation.

The Children of Crake exhibit curiosity and a constant eagerness to hear stories. They constantly ask questions, seeking to understand the reasons behind things. They wish to know every detail. In the first book of the trilogy, the narrator is Snowman, but later it transitions to Toby. They persist in narrating stories to avoid disappointing Crakers. They construct narratives that closely resemble the reality. For the Crakers,

this storytelling time becomes a kind of ritual. They expect the storyteller to wear the red hat, eat the fish they bring, listen to the shiny object, and then tell the story to communicate with Crake.

Blackbeard's role in continuing the narrative embodies multispecies approach to storytelling. The Crakers' actions and interpretations of the world, even if they do not possess human-level empathy or understanding, still carry weight and validity in this new ecological framework. The human survivors of the catastrophe learn to collaborate with Crakers to rebuild a more sustainable world, coming to the conclusion of narrative messaging co-creation and adapting together—a strategy to save the shared planet.

The examination of non-human agency in the trilogy reveals a notable narrative and ethical evolution in posthuman literature. Atwood decentralizes human dominion and creates opportunities for alternative narrative agency based on multispecies interaction and material life. Readers can come to the realization that agency is not just a human characteristic but a collective, emergent quality of all organisms. Storytelling transforms into a communal, posthuman endeavor—distributed across humans, nonhumans, and the material world. In Atwood's post-apocalyptic world, narrative agency is not a privilege of humans but a shared capacity that bridges species and materials. Through Blackbeard, the virus, and the Crakers' rituals, the trilogy enacts a storied ecology where matter tells, reacts, and remembers. The shift from human narrators to posthuman voices like Blackbeard's indicates not just a new storytelling model but a heightened ethical awareness, rooted in coexistence, reciprocity, and entangled becoming.

As Blackbeard states: "Now I will eat the fish. We do not eat a fish, or a smelly bone; that is not what we eat. It is a hard thing to do, [...] but I must do it." (Atwood, 2014: 435). This moment in the narrative marks a significant departure from the crakers' established view, which previously prohibited the consumption of animals and positioned meat as a remnant of violent, primitive human behavior. The phrase "smelly bone" especially recurs throughout the story and symbolically highlights their discomfort with the idea of death and flesh consumption.

However, not all readings of posthuman coexistence are unreservedly optimistic. While much of the discourse around cohabitation and mutual entanglement

emphasizes ethical learning across species and formation of non-hierarchical communities, some scholars express concern about how such communities might evolve over time. “if the development of their myths and culture shows that Crakers are moving away from their projected way of thinking, Blackbeard’s self-imposed eating of and animal might be read as implying that the Crakers might evolve into beings capable of exerting violence, thus abandoning their initially naïve outlook and behaviour” (Muñoz-González, 2021: 50). This reading highlights significant issues about the vulnerability of constructed innocence and the unpredictability of cultural development (50). If Blackbeard’s actions indicate not only an isolated incident but the start of a transformation, it may imply that the Crakers—despite their engineered purity—are not impervious to the intricacies and paradoxes of moral agency. In this context, Atwood may be also prompting the reader to consider if any semblance of ethical purity can be maintained in a changing environment, or whether posthuman subjectivity must always contend with the conflict between intention and adaptation.

CHAPTER SEVEN

ANALYSIS OF *THE OVERSTORY*

Richard Powers' *The Overstory* belongs to a growing body of environmental fiction that seeks to reshape human perspectives on natural life. *The Overstory* offers an insightful narrative about the symbiotic relationship between humans and trees, illustrating the deep and inseparable connections that bind them. The mysterious communication between human and nonhuman agents—this time within the plant familia—provides unexpected insights into the intricate interconnectedness of life and the principles of mutual coexistence in a shared ecosystem. The novel is organized under multiple sections, each focusing on different human characters and their individual journeys connected to trees. The narratives of these characters interweave, culminating in a broader discourse that explores the significance and majesty of trees, alongside the severe implications of deforestation and humanity's neglect of the natural world.

Power's book proposes "a re-centering of human history and literature around trees and forests as highly relevant, even unsurpassable, biotic and semiotic systems" (Manolescu, 2021: 1). Contrary to conventional portrayals of botany in literature, trees are depicted as active participants rather than passive entities. As Manolescu observes, "[t]rees become an alternative measure of all things in an attempt to question anthropocentrism and to represent humans and trees growing together in a joint narrative in which the emphasis is displaced from the former towards the latter" (1). In this joint narrative, vegetation is not only given a voice but is positioned as a central agent of meaning, which signifies a revolutionary approach that challenges traditional representations.

This reconfiguration not only challenges readers to rethink human exceptionalism but also prompts a deeper reflection on how humans and non-humans can coexist. Through its ecological philosophy and narrative experimentation, *The Overstory* offers a compelling engagement with posthumanism and environmental ethics, emphasizing the urgency of environmental activism and the necessity of recognizing the agency of non-human entities in our shared world.

The book is structured into four parts: roots, trunk, crown, and seeds—each symbolizing a stage in the life period of a tree. The narrative features nine human characters whose individual life stories converge as they take collective action against the destruction of trees and forests. Spanning several decades, the novel unfolds the journeys of nine human characters, all of whom become entangled in the events of the 1990 Redwood Summer in California. This environmental movement emerged as a protest against the destructive practice of clear-cutting ancient Redwood trees, which was a significant aspect of the “Timber Wars” that unfolded during that era. Initially, the diverse group of human protagonists seems disconnected from broader concerns beyond their personal lives, highly preoccupied with personal issues. However, as the narrative progresses, they undergo profound transformations, ultimately becoming deeply committed to safeguarding the remaining ancient forests, even at the risk of their own lives. Remarkably, throughout the novel, the trees themselves emerge as significant characters, their stories and voices taking center stage in the unfolding tale.

From the outset of Powers’ narrative, the author captures the reader’s attention by urging him to intrigue the Eurocentric notion in which “Man—the former measure of all things” is the ultimate meaning of value (Braidotti, 2013: 50). The narration and even the characterization of the novel put this human superiority over nature and nonhuman entities as not having any rights and voices. The humanistic view has long been contested by critical posthumanism, the idea that the central status of humans in the ecosystem and the thought of nature just being there for the sake of humans have paved the way for not only human exceptionalism but also the rampant exploitation of natural world elements. In the Anthropocene, humans have been facing the results of these misconceptions. The uncontrolled human exceptionalism and exploitation have led to the destruction of natural world elements, including species’ habitats, having negative effects on food chains in the ecology, causing scarcity due to overuse of sources, and an environmental crisis occurred due to excessive use of fossil fuel. As discussed in previous chapters in detail, as a result of these human recklessness and activities in the Anthropocene era, “humans became a geological force capable of affecting all life on this planet” (Braidotti, 2013: 5).

By tracing the lives of its human characters and their relationships with trees, Powers analyzes the critical role that natural elements have in shaping both individual

lives and collective histories. Although the novel presents a tricky but optimistic picture of a future in which people accept and even celebrate their interdependence with the environment, it also highlights the ecological difficulties of our contemporary world and makes a call for ecological activism. This dual perspective underscores the transformative potential of acknowledging non-human agency while urging readers to reconsider their moral duties toward the natural world.

In the first section of the novel, readers are introduced to the Hoel family, Norwegian immigrants who settled in the United States. A family tradition, passed down from father to son, involves the monthly photo-taking of the American chestnut tree. Each subsequent chapter introduces a new human character, by telling their individual life stories. Through reading the chapters about different characters, a common thread emerges: their unique relationship with trees. Similar to Hoel family, readers are introduced to Mimi Ma, an immigrant's daughter who is attached to and has the duty to care for a Mulberry tree inherited by her father, carrying the responsibility of caring for it. Another character introduced is Neelay Mehta, a computer genius who discovers that the genetic sequences embedded in various trees are linked to his own computer programs. Recognizing this connection, he creates a game inspired by it. Douglas, a war veteran, owes his life to a Banyan tree that saved him when he fell from a plane. Adam Appich, a psychologist, believes in the magical connection between children and the trees planted in their honor. Two notable female characters, Patricia Westerford and Olivia Vandergriff also contribute to the narrative in another aspect. Patricia, a PhD in forestry, uncovers that trees have social and communal nature. Olivia, initially portrayed as a college partygoer, who turns out to be an ecowarrior, camping out to prevent commercial loggers from cutting down trees, further enriches the narrative of the novel. At the beginning of the story, Ray Brinkman and Dorothy Cazaly appear indifferent to the natural world. However, as they grow together through their experiences with trees, they decide to plant a tree together, symbolizing their growing bond as a couple—much like raising a child together or starting a family.

Through the voice of one of the main protagonists, Patricia, Powers further challenges the traditional superiority views of humanity over trees: “[y]ou and the tree in your backyard come from the same ancestor [...] you still share a quarter of your

genes” (Powers, 2018: 166). Ultimately, when humanity accepts the unbreakable bond between itself and the natural world and recognizes the complex entanglements within nature, a state of mutual becoming can be achieved.

Humans have long been limited by their narrow perception of the natural world, often overlooking or taking for granted the vital role that plants play—a phenomenon termed “plant-blindness”, which is defined as the “inability to see or notice plants in one’s own environment” and ultimately this inability makes humans unable to “recognize the importance of plants in the biosphere and in human affairs” (Wandersee, 1999: 82). Plants were ranked just above the inanimate beings and “below animals and humans”, indicating their perceived inferiority. Their absence of “the characteristics that render animals superior, including movement, intentionality, or the ability to communicate” made them “imperfect” from an ontological standpoint (Gagliano, Ryan and Viera, 2017: ix).

While the novel frequently emphasizes the agency of botanical life, it also reflects on human transformation through science, as hinted in Neelay’s storyline. Transformative narratives like Neelay’s—where his paralyzed body is transcended by a digital avatar—illustrate a posthuman phenomenon that challenges traditional boundaries. This process, encapsulated by the concept of “transcorporeality” (Alaimo, 2016), demonstrates how one’s identity can be reconstructed beyond the conventional limitations of the physical body, enabling him to regain a sense of strength and agency through technological mediation. This challenges conventional boundaries between body and technology and aligns with posthumanist thought, which advocates for the dissolution of fixed biological identities in favor of more fluid and technologically mediated modes of a more inclusive notion of existence.

By examining a specific domain that underscores human uniqueness, the concept of posthumanism deconstructs the established boundaries between the human and the non-human, thereby raising important questions about the ethical and political entitlements of the non-human realm. In this literary work, trees are depicted as dynamic participants. Powers deliberately obscures and ultimately eliminates the distinction between human and non-human, challenging the traditional notion of one being superior to the other. In other words, he blurs and removes the boundary between human and non-human and the superiority of one over the other. The analysis centers

on human exceptionalism, examining its deconstruction in relation to plant development and philosophical discourse. It opens the discussion on the moral and political rights of non-human entities.

Ihab Hassan acknowledged that as humans, “[w]e know all too well the litany of our failures: pollution, population, power that serves only to suppress,” referring to damaging consequences of human activities and overuse of natural elements (Hassan, 1977: 848). In the section titled “warnings of the earth”, he urges humanity to listen: “the Earth must be heard [...], else Consciousness turn the Sky into Fire” (848). This powerful metaphor emphasizes the urgency of heeding the warnings of nature. The voice of nature, with its intricate processes of creating soil, cycling water, and building atmosphere, must be recognized and considered. By observing and respecting the intricate dynamics of ecosystems, people can start comprehending and acting in harmony with the Earth’s needs. This requires a change of perspective; it means the acknowledgment of nature as not a simple resource to be exploited but as a living entity whose balance must be preserved for the benefit of all different species and the system itself.

Powers opens the book with a scene that resonates with Hassan’s idea. In the opening scene, Powers offers no preliminary context, instead thrusting the reader into a world where “a human being is silently listening to trees which are eloquent and garrulous,” thus reversing familiar hierarchies by granting voice, agency, and environmental awareness to the nonhuman. (Austin, 2020: 14-15). In the scene, a woman sits on the ground in a park, leaning against a tree. The tree attempting to reach out to the woman, expresses frustration over humanity’s failure to see the deeper levels of existence, the whole picture. Humans, the tree argues, only perceive the obvious, neglecting the deeper layers of existence. The tree laments: “[t]hat’s the trouble with people, their root problem. Life runs alongside them, unseen. Right here, [...] Creating the soil. Cycling water. Trading in nutrients. Making weather. Building atmosphere. Feeding and curing and sheltering more kinds of creatures than people know how to count.” (Powers, 2018: 4). This passage emphasizes the neglectful attitude of humans toward nature and their failure to appreciate the complexity of what trees contribute to life on Earth. If humans were to truly “listen”—possibly meaning observe and strive to understand—they would discover much to learn from trees.

7.1. NON-HUMAN AGENCY: PLANT AGENCY

Each character of the novel undergoes a transformative moment in relation to trees. All of them are connected to trees in various ways—some by smelling them, others by listening to them, seeking signals to guide their lives—illustrating how human and nonhuman narratives intertwine and correspond with one another. The material agency of nature is a persistent force through the narrative, with trees being the primary agents of change. Unlike in traditional literary portrayals of botany and plants in general, where trees are often presented as actors and not stable objects, Powers presents trees as active actors.

In accordance with Bruno Latour's actor-network theory, Powers depicts both human and nonhuman actors as active contributors within a network of influence. According to Latour, all entities within an environmental system—whether human or nonhuman—are not stable participants; instead, they are “active agents that shape and shaped by their relationship within a network” (1996: 371). This portrayal of human and nonhuman characters not only deconstructs human exceptionalism but also raises moral, social, and political debates that posthumanist theorists have been studying in recent years.

In support of this perspective, Powers presents a vivid image in Patricia's narrative: “she spins short biographies of her favourite characters: loner trees, cunning trees, sages and solid citizens, trees that are impulsive or shy or generous. [...] This is not our world with trees in it. It's a world of trees, where humans have just arrived.” (Powers, 2018: 530). Humans, she argues, suffer from “plant-blindness” and only “seeing” things that resemble them, meaning they do not give enough attention to the surrounding elements (Powers, 2018: 143). This neglect calls for abandoning outdated notions of human superiority in favor of a posthumanist angle that truly “sees” the reality.

There is another significant aspect of posthuman thinking visible in the novel's characterization: human and nonhuman characters are not strictly bounded, but rather they share and sometimes exchange qualities. This phenomenon is an illustration of the “trans-corporeality” concept of Alaimo, which posits that “all creatures, as embodied beings, are intermeshed with the dynamic, material world, which crosses

through them, transforms them, and is transformed by them” (Alaimo, 2018: 1). The distinct boundaries between people and nature, historically established by humans themselves, are starting to blur, necessitating a fundamental reconsideration of human ethical obligations. Reminding us of the boundaries between our own bodies and the natural world we connect with is more blurred than we might have expected. Patricia mentions her love of the stories in which humans turn into trees, for example, in mythology, “Daphne, transformed into a bay laurel just before Apollo can catch and harm her” (147). “People turning into other things” becomes a notion that can be agreeable (150). When one of the human characters, Ray takes on the role of an oak tree in a theatrical performance, this opens up the way we see that humans can possess tree qualities, whereas trees might also possess some traits and senses reserved for humans.

After reading *The Overstory*, one is compelled to look at the trees with renewed curiosity. Patricia, PhD in forestry, uncovers the social nature of trees. She puts forward the idea that they can communicate with each other, stating that “the biochemical behavior of individual trees may make sense only when we see them as members of a community” (Powers, 2018: 75). She also highlights the genetic resemblance between humans and trees: “you and the tree in your backyard come from a common ancestor. A billion and a half years ago, the two of you parted ways. But even now, after an immense journey in separate directions, that tree and you still share a quarter of your genes.” (75). Patricia’s research demonstrates that trees communicate and alert one another of danger by means of biochemical signaling: “[t]hey’re linked together in an airborne network, sharing an immune system across acres of woodland. These brainless, stationary trunks are protecting each other.” (126). Despite lacking brains, trees exhibit a form of consciousness because they are social beings. They look out for one another, communicate, learn from one another, and exchange goods and services. For instance, a sugar maple that has been attacked by borers releases pesticides to warn its neighbors, prompting them to strengthen their own defenses in response. When the roots of two Douglas firs meet underground, they mingle, by joining vascular systems. Through those self-grafted knots, the two trees join their vascular systems together and become one. Networked together underground by countless thousands of miles of living fungal threads, Patricia’s trees feed and heal each other, keep their young and

sick alive, pool their resources and metabolites into community chests (126). When one tree falls ill, the other offers care. When a tree is cut down, the nearby trees become weakened, as though mourning the loss.

Patricia further elaborates on the interconnectedness of trees in her own book in the novel: “A forest knows things. They wire themselves underground. There are brains down there, ones that our brains aren’t shaped to see. Root plasticity, solving problems and making decisions. Fungal synapses. What else do you want to call it? Link enough trees together, and a forest grows *aware*.” (453). She contends, “The ‘environment’ is alive—a fluid, changing web of purposeful lives dependent on each other.” (454). This view is supported by Iovino and Opperman’s concept of material narrativity, which engages with the imaginative understanding of the unique lives of vegetal beings, who possess agency and the capacity to generate their own stories. The focus is placed heavily on the significance of materiality and its capacity to convey narratives. One clear method of storytelling, demonstrated by trees, is through the patterns and structure of their rings. When pine trees are felled in a park, Douglas examines a freshly cut stump: “The years roll away under his fingers – their floods and droughts, their cold spells and scorched seasons all written into varying rings”, this further exemplifies how materiality itself tells a story of nature’s rhythms and resilience (206).

Agential realism concept introduced by Karen Barad, also contributes to this discussion by challenging speciesism. Due to inherent biases based on species, humans are unable to fully appreciate the intricate web of exchanges that exists between all entities. The entire life on Earth is interdependent, and these biases make it difficult to see how humans rely on other elements of nature for their own well-being. In the beginning, the research area of speciesism was limited to animal species. However, in time it progressed to all living organisms. According to Barad, the matter requires an “active participant” position because of its “ongoing intra-activity” (Barad, 2007:136). There is continual “intra-action” between all living things, whether human or nonhuman. There has been prior knowledge of this, in contrast to the conventional view of “interaction” as the impact of one subject’s or object’s attributes on another. The subjects or objects in “intra-action” “[are not] fixed, [but are] produced and productive, generated and generative [...] agential, [...] differentiating” in contrast to

other systems (137). This demonstrates that no subject or thing exists in separation; instead, it is borne out by the fact that all identities are relationally produced, rather than intrinsically static. Proposed by Barad, all entities have “response-ability” (Barad, 2007). All creatures are agents in this linked existence, but only humans have ethical “responsibility” (Barad, 2007). Therefore, people must comprehend their interdependence with the material world and that survival is not an isolated pursuit. Accepting this truth increases ecological awareness.

As discussed in previous chapters, in *What is Posthumanism?* (2010), Cary Wolfe examines intersections of the posthumanism theory with other academic fields. He draws attention to the necessity of combining biology, principles of conduct, science and philosophy to fully understand posthumanism. Wolfe argues that merging these disciplines allows posthumanists to better understand humanity in times of crisis. Moreover, this approach rejects human exceptionalism and promotes a transdisciplinary, dynamic and unifying worldview. He urges scholars to transcend the traditional disciplinary boundaries and collaborate in studying the evolution of the various new relationships between technology and humans, as well as between humans and nonhumans. Powers’ novel reflects a similar approach to Cary Wolfe’s. In *the Overstory*, the characters represent a variety of academic fields: Patricia is a botanist, Adam Appich is a psychologist, Nicholas Hoel is an environmental artist, Douglas comes from military background, Neelay is a computer genius, Ray is a lawyer, Mimi is an engineer. Together, they offer different perspectives that, in turn, help them in their collaborative work in saving trees. This interdisciplinary diversity underscores the novel’s central argument: that addressing environmental crises requires a holistic, unified approach that transcends traditional disciplinary boundaries.

The *Overstory* advocates for a posthuman ethics based on relationality, multispecies entanglement, and collective ecological action via these interconnected viewpoints.

7.2. NON-HUMAN NARRATION AND STORYTELLING

The Overstory cultivates a revitalized ecocritical perspective on diverse and interdisciplinary knowledge by “treeing its narrative” (Meinen et al., 2019: 42).

Powers challenges the anthropocentric narratives that have historically prevailed in Western philosophy by emphasizing trees as autonomous, communicative, and narratively important entities. This transition challenges anthropocentrism and aligns with the posthuman critiques that decentralize human authority in meaning-making. This echoes Val Plumwood's (2009) criticism of "hyperseparation," which refers to the conceptual and perceptual estrangement of humans from the more-than-human realm. Plumwood contends that a consequence of this is "a failure to understand embeddedness in a dependency on nature, that it distorts our perceptions and enframing in ways that make us sensitive to limits, dependencies and interconnections of a non-human world" (3). This failing, she asserts, produces "a deceptive perception of our character and position that encompasses a misleading sense of agency and autonomy (3). In fact, Powers's story shatters this illusion by exposing a universe where agency is distributed, interconnected, and shared across species borders, rather than the autonomous human subject. The book accomplishes what Plumwood asks for in terms of an ontological and ethical transformation by placing humans in a broader ecological context where nonhuman living forms are not only significant but also able to communicate, remember, and persist (3).

Eduardo Kohn and Elizabeth Povinelli's research on semiosis in nonhuman animals is mirrored in this dispersed agency paradigm. In "How Forests Think," it is stated that: "[a]ll living organisms resemble us, provided we recognize that our primary mode of semiosis, language, constitutes merely one of numerous forms of semiosis," (2016: 4). Communication based on language principles is no longer the standard.

Trees' function in the story as entities that facilitate interactions across various spatial and temporal dimensions. Any existing matter, whether alive or nonliving, may be seen via Haraway's "semiotic actors" concept as a subject in and of itself, a means of communication with the outside world and a bearer of meaning. The meaning and relationship dynamics of an ecosystem are shaped by these dynamic issues. According to Haraway, "[t]he codes of the world are not still, waiting only to be read. The world is not raw material for humanization; [...] the world encountered in knowledge projects is an active entity" (1988: 593). This assertion highlights that the natural world actively participates in the co-creation of meaning, rather than having meaning forced

upon it by people. Humans are not the only organisms that have the capability to convey meaning, but other entities—animals, machines, technologies, and natural elements—can also convey meaning; they can play an active role in decision-making and generate ethical effects. For instance, Patricia demonstrates that not only humans, but also other elements of the natural world communicate meanings via unique ways: “the trees under attack pump out insecticides to save their lives. That much is uncontroversial. But something else in the date makes her flesh pucker: trees a little way off, untouched by the invading swarms, ramp up their own defenses when their neighbour is attacked. Something alerts them” (158). Such examples compel us to reevaluate conventional definitions of communication and meaning, expanding them to include the semiosis of nonhuman entities. The novel’s emphasis on language and narrative thus invites a broader understanding of how meaning is created and who or what contributes to the process.

The material world—a world that includes “inanimate” matter as well as all nonhuman forms of living—has always been considered “passive”, “inert”, “unable to convey” any independent expression of meaning (Iovino & Oppermann, 2014: 2). Iovino and Opperman introduce the concept of material narrativity to engage imaginatively with the experiences of vegetal agentic beings that can generate their own narratives (2012: 468). One of the most visible ways of trees storytelling could be through their rings. For instance, when Douglas was working in a park, during the process of cutting down a tree, kneeled to observe its story closer: “The years roll away under his fingers—their floods and droughts, their cold spells and scorched seasons all written into varying rings” (Powers, 2018: 257).

In line with Iovino and Oppermann’s material narrativity, Michael Marder “the silence of vegetal life [...] is broken and disrespected” (Marder, 2017: 113), further emphasizing that the narrative of nature is vibrant and cannot be ignored. The natural world is alive, and the “awareness” is not only a specialty for human beings: as Patricia observes, “[a] forest knows things. They wire themselves underground. There are brains down there, ones that our brains aren’t shaped to see. Root plasticity, solving problems and making decisions. Fungal synapses. What else do you want to call it? Link enough trees together, and a forest grows *aware*.” (Powers, 2018: 566-567).

The reimagining of perspective is also reflected in the novel's structure. Powers strives to give voice to the trees, inviting the reader to see the world from their perspective. In the novel, human lives are positioned as the novel's '*understory*,' while non-human nature—particularly trees—serves as the '*overstory*', thereby signaling a profound change in how nature is portrayed (Stanford, 2018).

The Hoel family's storyline provides one of the clearest depictions of trees as living archives of memory and identity. The character Nick Hoel comes from a family of artists and inherits a deep appreciation for trees from his ancestors. The Hoel family has the tradition of photo-taking under the Hoel tree that has been a member of family for generations. By reviewing these family portraits, young generations can witness the years and changes in the family/memories. These photos become a treasure inherited by the children. The Hoel Chestnut becomes a landmark, witnessing not only the history of the Hoel family but also the neighbors. Since it survived a special disease for trees, all neighboring trees die at that season, the Hoel chestnut proudly extending its branches to the sky. The tree becomes a family member, and even in the novel, Nick describes a vivid memory of him when his whole family dies due to gas poisoning at home at a time of misery and not knowing what to do next. He approaches the tree and sees that it shakes its branches as it is also praying over the misery of its family. The tree becomes not only a background element in the family's life, but a living repository of memory and identity that mingles with human histories.

Ultimately, *The Overstory* is a thought-provoking reflection on nonhuman narration that should make people reconsider their ethics and narrative assumptions in light of the perspectives of plants and animals. Powers demonstrates how trees, more than just symbols, actively participate in a common ecological narrative, telling tales, remembering history, and shaping meaning via instances such as Patricia's study, Douglas's introspection, and the Hoel family tradition.

7.3. MUTUAL BECOMING AND MAKING KIN

Haraway aims to highlight that what people call "us" does not necessarily include humans (2008: 4). In her seminal article on the "making kin" concept, Haraway draws our attention to Jason Moore's arguments on the overuse of natural

resources by stating “[...] cheap nature is at an end” (Haraway, 2015: 160). Beginning in the Anthropocene era—the period of excessive human activity affecting the environment—and then extending into the Capitalocene era—the period of material profit gained by exploitation of the environment and economy based activities, the human activities have caused permanent effects on ecology and biodiversity. The species’ natural habitats are devastated; clear-cutting of forests made significant habitat and climate shifts.

An important distinction between “making kin” and “making kinds” is brought out by Haraway. One’s own lineage does not always need to be perpetuated via biological reproduction in order to be considered kin. For a more welcoming and caring “assemblage” (2015: 162), she proposes the idea of “relatives without ties by birth”. She states that “the stretch and recomposition of kin are allowed by the fact that all earthlings are kin in the deepest sense, and it is last time to practice better care of kinds-as-assemblages.” (162). After years of craving a child of their own, Ray and Dorothy decide to adopt a chestnut tree in their garden as their daughter, literally making kin across species, as suggested by Donna Haraway’s “Making Kin”. “What we *care* for, we will grow to resemble. And what we resemble will hold us, when we are us no longer.” (1988: 499). The boundary separating the two kinds—trees and humans—ultimately disappears. Exemplified in the novel through Patricia’s studies, in which she finds out that in some native beliefs, trees are regarded as kin, imbued with hopes, fears, and social codes.

The narrative of *The Overstory*, invites readers to explore new angles towards nature. As Haraway cites Anna Tsing, the activities of “clear-cutting, upset the possibility to reconstitute rich multispecies assemblages” (2015: 159). Jason W. Moore, echoes this ecological urgency by asserting “cheap nature is at an end” (2015: 292). As discovered by Patricia, despite not having brains—the human organ related to intellect and existence in traditional viewpoints— trees are “conscious” because they are social beings who look out for one another, communicate, learn from one another, and exchange goods and services. A sugar maple that has been attacked by borers releases pesticides to alert its neighbors, who then strengthen their own defenses in response. When the roots of two Douglas firs meet underground, they mingle,

joining vascular systems; if one tree gets ill, the other takes care of it. When a tree is cut down, other trees nearby become weakened, as though in grief.

One of the novel's main characters, Mimi Ma, provides another dimension to interspecies kin-making. As an immigrant's daughter, her story deeply rooted in familial memory and cultural transmission. In order to understand her connections with trees, it is insightful to review her background, especially her relationship with her dad. Ma Sih Hsui, is also an immigrant who comes to America as his family's salvation. While he leaves his home, his father gives him three wooden flats which hold "generations of Ma family profit, from the Silk Road to the Bund, in a movable form" (31). His father also presents three types of special trees: the first tree in their backyard in their hometown—as the tree of life for his Persian ancestors, the second tree stands in front of them—their present, and the third tree is all around them. Now it follows "them" wherever they go—he stored trees as a family fortune to be transmitted to the following generation.

She inherits her father's initial to grow a mulberry tree after he dies. The mulberry tree signifies lots of things for the family. It represents the relationship between their past and future generations. Father warns his children by saying a Chinese saying, "when is the best time to plant a tree? Twenty years ago" (Powers, 2018: 37). It is so precious to plant trees; do it whenever you have chance. Now that her father is no more in life, she inherits the role of protector of this tree as if it is a family member to care for, metaphorically resonating with the idea of making kin across species.

According to her theory of "making oddkin," Haraway proposes that organisms need each other in unexpected partnerships and combinations, so they either become together or not at all (2016: 4). Instead of trying to fix the world, she suggests humans engage in "becoming-with," a process of co-evolution with other species that recognizes the interdependency of all entities and concludes that humans are responsible for ethical coexistence. Throughout the novel, we see the characters fighting to preserve the natural. In the end of the novel, all the characters share the same final idea: If forests are not protected, nature will exact its retribution. The novel presents a compelling motivation to establish connections and relationships with the plant life found in parks, forests, and environment. It encourages a sense of kinship

with these vegetal beings, acknowledging the responsibility of caring for them, regardless of the outcomes, whether they be positive or less favorable.

Furthermore, Michael Marder highlights the ongoing, mutually transformative relationship between this altered human thinking and the existence of plants (Marder, 2013: 125). This symbiosis challenges the traditional boundaries of cognition and emphasizes that human thought is deeply interwoven with the vegetal world (125). Humans are interdependent with nature, which requires moral consideration and responsibility. Haraway argues that humans are part of a larger ecological system. Echoing Haraway's call for symbiogenesis, this perspective requires us to rethink our place in nature and consider ourselves as part of the system- where ethical responsibility and kinship extend beyond the human realm.

As Powers depicts his intention in an interview, "once you begin to see trees—really see them as creatures with agency and intention and the capacity to communicate—they become characters in their own right. My goal, in *The Overstory*, was to treat trees as persons in their own dramatic narrative" (interview with Bradford Morrow, *Conjunctions* 70 [Spring 2018]). Powers reinterprets the forest as a collective of sentient beings and urges readers to acknowledge kinship as an ecological principle vital for life in the more-than-human realm.

7.4. ETHICS AND ACTIVISM

Although all the human characters come from different backgrounds and have various life experiences, they all find themselves entangled in the events of the 1990 Redwood Summer in California, for protecting the remaining forests by even risking their own lives. Throughout their own individual journeys, each has different connections with trees, and some have good, and some have bad experiences, but they owe something to trees.

After being saved by a banyan tree, Douglas devotes his life to planting seeds and protecting the remaining forests. When he encounters people who are cutting down trees in national forests, which should be regarded as protected land, he asks the reason and gets the saddening answer "you are thinking national parks. National forest's job is to get the cut out, cheap. To whoever's buying" (Powers, 2018: 109). He continues

planting seedlings back to those spaces, motivated with the idea that in the future they might remake the forest. Losing his hope on humanity, warns the trees to “hang on. Only ten or twenty decades. Child’s play, for you guys. You just have to outlast us. Then no one will be left to fuck you over” (113). He acknowledges that humanity is creating its own end, and after the human extinction the world may be a better place, and trees may be peaceful at last.

Adam, who has always been fascinated by trees and ants, experiences a pivotal moment in his life when he survives a near-death situation in a forest. This situation changes his perception of the natural world and raises his awareness of ecological consciousness. However, seeing the people around him, he loses belief in humankind. He realizes “humankind is deeply ill” and comes to a harsh conclusion that: “the species won’t last long, soon the world will be returned to the healthy intelligences, the collective ones. Colonies and hives” (70). He further claims that “we are all trapped in the bodies of sly, social-climbing opportunists shaped to survive the savanna by policing each other” (76). In order to create difference, he joins an eco-activist group called “Earthsave” and participates in protests and environmental activities related to protecting trees.

Olivia begins as a college partygoer who turns out to be an ecowarrior, camping out to stop commercial loggers from cutting down trees. She commits herself to ecological resistance after a near-death experience, taking up residence in the forest and actively fighting against loggers. Similar to Adam’s path, hers highlights the way in which lived experience and corporeal connection to nature give rise to ethical duty.

In the novel, the narrative engages technological developments with ecological consciousness to explore ethical questions and trigger activism. Neelay’s individual story emerges as a symbol of the interplay between technology and nature. His father teaches him that even a tiny seed can grow into something much larger if nurtured consistently. This life advice is clearly traced in Neelay’s work in computer programming, where he practices “branching” on a microchip given by his father, a symbol of the possibility of expansion natural with the technological means. The narrative powerfully illustrates that “[t]he seed his father plants in him will eat the world” (120). Following his paralysis after falling down a tree, he directs his abilities towards the development of a virtual forest—a digital environment that engages

players in the significance of environmental conservation, wherein he perceives his own body as an avatar. This creative act underscores his profound connection to the natural world and promotes a collaborative, multispecies initiative aimed at addressing the imminent threat of ecological collapse.

Patricia, meanwhile, expresses her gratitude for all the things trees provide humans free: “thank you for the baskets and boxes, for the capes and hats, the beds, the cradles, the tools, the clothes closets, for all these gifts that you have given. We’re sorry. We didn’t know how hard it is for you to grow back” (170). Recognizing the inherent value of trees, she expresses regret for humanity’s negligence and failure to appreciate their contributions.

Because of how interdependent all living things are on one another—including trees—it seems logical that our own individual ongoing existence depends on the functioning of other biodiversity areas and species. By reshaping social institutions based on lessons learned from ecosystems and trees, the book envisions a future in which people coexist with nature in greater balance. Nick’s writing the word “Still” in large letters as the final message at the end of the story can be regarded as a hopeful conclusion: it symbolizes the survival of the forests and represents hope for a better and more interconnected future.

CONCLUSION

Both *The Overstory* and *The MaddAddam Trilogy* explore the evolving nature of humanity amid ecological shifts, highlighting the increasingly indistinct boundaries between humans and nonhumans. In Atwood's work, the human condition is primarily interrogated by the progress in genetic engineering and scientific advancements. New species like the Crakers—genetically produced creatures meant to be ethically pure and devoid of human flaws—make it harder to separate humans and the non-humans. The development of bioengineered species proves that humanity's biological upgrading is possible. Similarly, in Powers' work, reconnecting with nature changes humanity's self-image. By portraying humans' interconnectedness with nature, especially with trees, it demonstrates that humans are not separate or superior to the world they live in. Reading through the character's individual stories, the readers can explore the agency of the other entities in the ecosystem. This shift from an anthropocentric framework to a more ecocentric one opposes humanity's central place in the ecosystem and proposes a more inclusive point of view.

Both works explore the posthuman alteration of the body and psyche due to ecological and technological influences. In *The MaddAddam Trilogy*, biotechnology and the effects of living in a society where technology and nature are inseparable change people physically and mentally. For instance, the Crakers are biologically created to lack hostility and dominance, making us to interrogate the human essence. Beyond physical alterations, this bodily metamorphosis involves new behavioral and cognitive processes that challenge human values and ideals. In contrast, *The Overstory* depicts humanity's mental transformation as it fosters reevaluation of humanity's relationship with trees and the surrounding world. Human characters evolve psychologically and emotionally as they learn more about life. Powers implies that one must interact with the non-human world in order to fully comprehend what it is to be human. Both works emphasize that mankind is no more a static, isolated species but the product of its surroundings, technology, and interactions with the biosphere. *The Overstory* and *The MaddAddam Trilogy* challenge current assumptions of what it means to be human by showing how humans must learn how to adapt to a changing reality.

The shifting comprehension of agency questions the human-centric views of responsibility in both works analyzed. New species like the Crakers demonstrate alternate agency in *The MaddAddam Trilogy*. Genetically created to lack human violence and aggressiveness, the Crakers are a species with agency informed by their biological programming and ethical obligation to the planet. Their existence implies interdependence with all creatures, human and non-human. Since the Crakers are human creations, there arises the ethical question: should humanity have the power to create and change conditions for non-human entities? In Powers' work, trees communicate, defend each other, and modify the environment. These activities vividly put them in the role of an active participant in existence. In general, both works make non-human entities active players in the ecology. These works expand ethical obligation beyond human interests to include all residents of the planet.

The MaddAddam Trilogy and *The Overstory* explore collaborative transformation, where humans and non-humans evolve together. The Crakers are genetically developed to live in peace with the environment and are a symbol of mutual becoming in the trilogy. The Crakers' mutualistic interaction with their habitat and each other shows how all species affect the natural world. The characters in *The Overstory* learn how their lives depend on the well-being of other species, emphasizing the interdependence of people, trees, and ecosystems. The narrative illustrates that people depend on trees and ecosystems to survive. Both works propose that human and non-human species are co-evolving and helping each other survive.

In both literary works, the notion of interdependence across species is a key theme. The narratives demonstrate how every natural element, either human or nonhuman, has a pivotal role to play in maintaining the balance in ecology. Both works offer an ethical paradigm that promotes interspecies collaboration and the mutual flourishing of all living forms, challenging human-centric ethical frameworks.

Powers endeavors to provide narrative prominence to trees, categorizing human existence as the "understory" and non-human nature as the "overstory" (Stanford, 2018), whilst Atwood presents an opposing but complimentary inversion. In the postapocalyptic world of the Crakers, humans—formerly dominant—become marginal, even superfluous. As Toby notes, these bioengineered species are "preternaturally beautiful [...] unlike (humans)" and might perceive humans not as

superior ancestors but as flawed, primitive, and perhaps “subhuman” individuals characterized by their aggressive inclinations and erratic emotional responses (Atwood, 2014: 48). This hypothetical inversion of hierarchy urges the reader to engage with posthuman reconceptualizations of agency and value. Both works thus undermine the traditional human-centric hierarchy from contrasting perspectives: Powers raises trees to the status of narrative actors, whilst Atwood interrogates the ethical and biological physical capacity of humans to occupy a superior position within any ontological framework. Collectively, they provide a robust posthuman critique of exceptionalism, indicating that the future of storytelling—and survival—hinges on multispecies cooperation and a profound reconfiguration of relationality.

In Atwood’s and Powers’ work, environmental activism aids the protagonists in maintaining ecosystem balance and advocating for environmental justice. For instance, an eco-activist group called God’s Gardeners, come together to restore the ecological balance. Similarly, the main characters gather in the Overstory in eco activist event to stop deforestation and raise awareness about the significance of trees. The narratives demonstrate how collaborative action may become a movement for environmental justice, even starting with little local initiatives.

In the trilogy, survivors must make ethical considerations about genetic breeding while rebuilding the new society from scratch. As humans’ previous deeds have caused terrible consequences, this time, characters must examine the morality of their actions to reconstruct the social life and heal the natural world. In Powers’ work, protagonists’ illegal and extremist protests present ethical reconsiderations. Both books demonstrate that preserving the environment requires direct action and a fundamental transformation in our connection with the planet.

Posthumanism involves reconsidering social structures, relationships, and systems as well as physical alteration. In both texts, posthumanism restructures human relationships from exploitation to cohabitation with non-human entities. Both works use posthuman ethics to reshape the future, claiming that ethical responsibility to the natural world may prevent apocalyptic consequences from environmental neglect. Moreover, their narratives depict the possibility of a posthuman future where mankind either learns from its errors and embraces ecological cooperation—agrees on “mutual

becoming” and “stays with the trouble”—or the reckless activities of humans will prepare their inevitable annihilation (Haraway, 2016: 4).

In exploring the concept of “staying with the trouble”, it becomes visible that sustainability is not only an environmental concern but a deeply personal and transformative practice (Haraway, 2016: 4). The modern concept of sustainability first emerged in the second half of the 20th century. However, its roots go back to traditional practices of living in harmony with the environment. The widespread recognition and institutionalization of sustainability can be traced back to the 1987 Brundtland Report titled “Our Common Future” published by the United Nations (Brundtland, 1987). In this report, sustainable development is defined as “[h]umanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987). This definition encapsulates the focus of sustainability: addressing current necessities while safeguarding the natural life. Sustainable development now encompasses economics, social justice, and governance as well as environmental issues. It was linked to ozone layer depletion and global warming when it emerged. As pollution from industrialization and population expansion increased and rural residents moved to cities, sustainability became increasingly personal for some groups. For those who are longing for returning to “natural days,” sustainability became a virtue in homes and individual lives. This change reflects posthumanist and material ecocritical perspectives, which reject the primacy of human needs and promote a symbiotic connection between humans and nonhumans. The notion of sustainability and the prevalent concepts aimed at reconnecting with nature have impacted individual lives, promoting involvement in activities such as composting, buying organic products, recycling, supporting local production, and maintaining zero-waste kitchens. These trending activities have become essential to the daily lives of many individuals.

The global population is increasing at an unprecedented rate, and people are consuming natural resources at a concerning speed. Pollution and lack of natural rejuvenation worsen this situation. Local changes are needed to make the world more livable and sustainable since the planet is the collective heritage of mankind. Adopting a personal responsibility will embody the concept of “staying with the trouble”—facing obstacles instead of evading them. Acknowledging the role in the deterioration

of the surroundings also means embracing the potential to act as agents of change. The tenet of sustainable living is to consume only what is necessary. Eliminating certain behaviors rooted in the capitalist system becomes essential; instead, one should concentrate on natural foods and have a zero-waste kitchen to help to lower trash output. The first step is to reduce waste, while the second is to separate what is produced efficiently.

For instance, sorting waste in the home life has become an essential practice. Separate bins are maintained for recyclable waste, compostable materials, and other waste types. Recyclables are disposed of in special bins, while compostable ones are transformed into fertilizers for gardens. This practice supports recycling efforts and embodies the principle of caring for *all agencies*, recognizing that even waste materials play a role in the larger system of nature's regenerative processes. While packaging serves crucial functions, such as protecting products and ensuring their durability, the increasing demand for single-use packaging has prompted a reevaluation of sustainable options. As discussed in previous chapters of this dissertation, if not solved, plastic waste becomes a big and irreversible problem, a *hyperobject* (Morton, 2013: 27). Paper-based packaging, recycled materials, biodegradable or compostable materials, and alternatives like glass and metal are now prioritized. Reusable alternatives to plastic bags further contribute to minimizing plastic waste.

Supporting local cooperatives and farmers, particularly those engaged in organic agriculture, strengthens the interrelation of human and non-human entities, a concept fundamental to posthumanism and the notion of "making kin". Seasonal gardening practices and adopting a zero-waste kitchen involves buying only what is needed and ensuring that natural scraps are composted to create nutrient-rich soil for gardening. This practice resonates with Donna Haraway's (2016: 134) "Children of Compost" concept, emphasizing regeneration, interconnectedness, and keeping the wellbeing of the earth for future generations.

The relationship with nonhuman beings, such as the family dog, also exemplifies the interconnectedness of life. Living with animals serves as a reminder of the intricate web of relationships that fastens humans and nonhumans together. This companionship fosters care, responsibility, and an appreciation of living in harmony with other species, aligning with Haraway's philosophy of "making kin" (2016: 99).

The use of bicycles and carrying reusable water bottles helps minimizing the environmental impact of humanity. In particular, water sustainability is critical, and choosing natural products for cleaning at home contributes to both personal health and environmental preservation.

Driven by the awareness of depleting resources and the adverse effects of unrestrained consumption, more sustainable behaviors are embraced. The fundamental inquiry: *Do I truly require this?* The question challenges the impulse not to buy continuously, promoting a transition towards zero-waste lifestyles and simplicity. This transition emphasizes that sustainability is not only a global notion but rather that it is profoundly personal and transforming. By adopting these values, humans facilitate “staying with the trouble,” “mutually becoming,” coexisting with the environment, and serving as agents of positive change (Haraway, 2016: 4).

This dissertation aimed to challenge anthropocentric viewpoints within the Anthropocene and to explore the development of a new understanding of humanity through the lens of posthumanism. To achieve this, the study analyzed Margaret Atwood’s *MaddAddam Trilogy* and Richard Powers’s *The Overstory*, emphasizing their roles in posthumanist discourse and climate fiction.

The posthumanist perspective indicates that the works of Atwood and Powers reevaluate humanity’s place within the environment and challenge anthropocentric ethical frameworks. The works not only foster a profound awareness of ecological concerns but also prompt the reader to reassess the human-nature interaction. They urge readers to adopt more ethical and sustainable viewpoint in the contemporary world.

Donna Haraway’s (2016: 4) notion of “becoming-with” as expressed in her writings on companion species and mutuality, provides a significant framework for examining the *MaddAddam Trilogy* by Margaret Atwood and *The Overstory* by Richard Powers. Haraway emphasizes the need of living in harmony, promoting ecological consciousness, and acknowledging multispecies interdependence as critical components of establishing a more sustainable and balanced society. These ideas are fundamentally similar to the subjects examined in both literary works.

In *The MaddAddam Trilogy*, Atwood envisions a post-apocalyptic world where genetically modified organisms such as the Crakers re-define the notion of

cohabitation. Their harmonious interaction with nature embodies Haraway's theory of mutual living as a preferable alternative to hierarchical, anthropocentric institutions. Likewise, *The Overstory* emphasizes the interconnectedness of human and nonhuman existence, particularly by depicting trees as active participants in ecological systems. Powers' story emphasizes the imperative of ecological consciousness and the moral need to promote coexistence, echoing Haraway's urging a societal rethinking of interspecies connections.

Collectively, these works reflect Haraway's beliefs by demonstrating that a future based on mutual respect, ecological awareness, and interdependence might act as a feasible remedy to the detrimental inclinations of modern human conduct. The *MaddAddam Trilogy* is a profound work of ethical questions about the role that humanity will play in shaping future species and ecosystems. Atwood critically looks at the exploitation by humans of science and technology to dominate rather than coexist, urging ecological stewardship. Likewise, *The Overstory* confronts an ethical dilemma: choosing economic gain over environmental preservation, representing trees as moral agents and major participants in Earth's ecological balance.

This research is an invitation to action for reevaluating the position of humankind around the globe during the Anthropocene epoch. This approach, which is founded on the posthumanist viewpoint and climate fiction, not only provides a significant addition to the area of literature, but it also contributes significantly to the ethical and ecological debates that are now taking place. It encourages readers to adopt an integrated worldview that transcends human exceptionalism and fosters an interconnected dedication to sustainability and cooperation in the Anthropocene era.

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