Cappadocia University

School of Graduate Studies and Research

Department of English Language and Literature

POSTHUMANIST TRANSGRESSIONS ALONG THE HUMAN-ANIMAL BORDERLINE: H.G. WELLS'S THE ISLAND OF DR. MOREAU AND ANN HALAM'S DR. FRANKLIN'S ISLAND

Şulenur BİLGİN

Master's Thesis

Nevşehir, 2024

POSTHUMANIST TRANSGRESSIONS ALONG THE HUMAN-ANIMAL BORDERLINE: H.G. WELLS'S THE ISLAND OF DR. MOREAU AND ANN HALAM'S DR. FRANKLIN'S ISLAND

Şulenur Bilgin

Cappadocia University

School of Graduate Studies and Research

Department of English Language and Literature

Master's Thesis

Nevşehir, 2024

ACKNOWLEDGEMENTS

Embarking from Mustafapaşa, Turkey and concluding in some point in Vietnam, this thesis journey has been both quite hectic and compelling. Thus, I am genuinely thrilled to have reached this point. I would like to express my heartfelt thanks and gratitude to my esteemed thesis advisor, Assist. Prof. Dr. Gülşah Göçmen, whose constant support and insightful feedback have played a crucial role in shaping this study. She has consistently been available when I needed assistance, contributing significantly to the development of this work. Had it not been for Göçmen's invaluable guidance and unwavering faith in my abilities, this thesis would not have been possible.

I extend my thanks to dear Assoc. Prof. Dr. Sinan Akıllı, who played an essential role in shaping my ideas and establishing a solid academic background with the MA courses he has taught until late hours. I also would like to express my gratitude and special thanks to Assoc. Prof. Dr. Hakan Yılmaz for his invaluable feedback and questions which help this study reach new depths of analysis and clarity.

Moreover, I would like to thank to Assoc. Prof. Dr. Kerimcan Yazgünoğlu and Assist. Prof. Dr. Ekin Gündüz Özdemirci whose courses broadened my perspective and equipped me with a critical lens. I am also grateful for the invaluable support that Assist. Prof. Dr. Burak Yiğit and Assist. Prof. Dr. Emine Şentürk showed since my freshman year at Akdeniz University. Their guidance has been influential in my academic journey.

In addition, I would like to thank my family for the unwavering support and belief. I also owe a debt of gratitude to my friends/colleagues for their emotional and academic support, who also are in the blink of becoming successful academicians: Special thanks to Anıl Esmeyar, Dr. Gizem Karaağaç, and Utku Zobarlar, whose opinions and friendship have provided invaluable guidance throughout this journey.

The most special thank goes to my colleague, spouse, and my best friend Cenk Takım for his unwavering support, countless hours of brainstorming sessions, and relentless encouragement throughout this journey. His amity has been a source of strength and motivation, making every challenge seem surmountable.

ÖZET

BİLGİN, Şulenur. İnsan-Hayvan Sınırında Posthümanist Sınır Aşımları: H.G. Wells'in *The Island of Dr. Moreau* ve Ann Halam'ın *Dr. Franklin's Island* Romanları, Yüksek Lisans Tezi, Nevşehir, 2024.

Bu tez, H.G. Wells'in *The Island of Dr. Moreau* (1896) ve Ann Halam'ın *Dr. Franklin's Island* (2001) adlı iki bilim kurgu romanının posthümanist bir okumasını sunar ve insan-hayvan ilişkilerini, insan-hayvan hibrit karakterler ve onların insan yaratıcıları üzerinden inceler. Bu tür hibritliklerin temsillerinin yanı sıra bunlara verilen tepkileri de incelemeyi, seçilen romanlarda gözlemlenen söylem, ideoloji ve tutumlarda gömülü olan antroposentrik zihniyeti ortaya çıkarmayı amaçlamaktadır. Yukarıda bahsi geçen romanlarda gözlemlenen insan-hayvan sınırlarındaki ihlallerin kurgusal tasvirleri, insan-hayvan hibritleri hakkında karşılaştırma yapılabilecek farklı etik duruşlar da sunmaktadır. Seçilen romanlardaki karakterlerin tepkileri, insan ve insan olmayan hayvan türleri arasındaki ayrımı onaylayıcı bir şekilde vurgulayan türcülük ile, insan ve insan olmayan hayvan arasındaki kategorik ayrımı çürütmeye çalışan, dolayısıyla insanları, hayvanları görmenin ve onlarla yaşamanın dışlayıcı değil kapsayıcı biçimlerini düşünmeye davet eden türler-ötesicilik arasında gidip gelmektedir. Bu bağlamda bu tez, ironik bir şekilde, posthümanist potansiyellerin örnekleriyle dolu olsalar da, hem Wells'in hem de Halam'ın romanlarını antroposentrik ideallerin kalıntıları olarak ele alacaktır. Böylece, bu hümanist ve antroposentrik romanlara posthümanist ve post-antroposentrik bir eleştiri getirecektir.

Anahtar Sözcükler

Posthümanizm, Hibridite, Antroposantrizm, Post-antroposantrizm, Humanimal, Posthüman, Türler Ötesicilik

ABSTRACT

BİLGİN, Şulenur. Posthumanist Transgressions along the Human-Animal Borderline: H.G. Wells's *The Island of Dr. Moreau* and Ann Halam's *Dr. Franklin's Island*, Master's Thesis, Nevşehir, 2024.

This thesis offers a posthumanist reading of two science fiction novels, H.G. Wells's *The Island of Dr. Moreau* (1896) and Ann Halam's *Dr. Franklin's Island* (2001), and examines human-animal relations through human-animal hybrid characters and their human creators—scientists. Examining the representations of such hybridity as well as the responses to them aims to reveal the anthropocentric mindset embedded in the discourses, ideologies and attitudes observed in the selected novels. The fictional representations of transgressions of human-animal boundaries observed in the novels also offer different ethical stances on human-animal hybrids to compare. The reactions of the characters in the selected novels oscillate between speciesism, which emphasizes the distinction between human and non-human animal species, and trans-speciesism, which seeks to erode the categorical distinction between human and non-human animals, thus inviting people to consider inclusive rather than exclusive ways of seeing and living with animals. In this context, this thesis will treat both Wells's and Halam's novels as remnants of anthropocentric ideals, though ironically full of examples of posthumanist potentialities. Thus, this thesis will offer a posthumanist and post-anthropocentric critique of these humanist and anthropocentric novels.

Keywords

posthumanism, hybridity, anthropocentrism, post-anthropocentrism, humanimal, posthuman, trans-speciesism

TABLE OF CONTENTS

INTRODUCTION

From Humanism to Posthumanism: Exploring the Intersections of Humanity and Animality

> Once upon a time, there was a disease called anthropocentrism. It was the 21st century on planet Earth. Humans were healing.
>
> —Francesca Ferrando, *Philosophical Posthumanism*

Etymologically, the term 'human' in English language evokes associations between soil and us. It originates from the Latin word *humanus*, derived from the word *humus*, which means 'earth,' and enters the language through French. Despite the contemporary perception of human superiority and exceptionalism, the word 'human' is strongly linked to the word 'humble,' which is also derived from the word *humus*, and can also indicate 'close to the ground.' In other words, we are the creatures of nature, that is, we are earthlings (Sax 23). Yet, the word human also offers an intricate definition as a term. The difficulty and complication of the term arises from the onto-epistemology[1] of the human species itself as it arises such questions as: How do we position ourselves among all inhabitants of nature? Are we part of the animal kingdom? If so, why do we lack features like feather, fur, or claws found in other animals? Why are we naked? On the other hand, if we see ourselves too intelligent and superior to be in the same family as chimpanzees, cats, or snakes; do we envision ourselves as divine, akin to gods and goddesses? Or are we the intelligent beings with significant agency, yet doomed to be

[1] The term onto-epistemology, which is "the study of practices of knowing in being" (*Meeting* 185) is coined by American feminist theorist and physicist Karen Barad. In her book, *Meeting the Universe Halfway* in 2007. To Barad, the "separation of epistemology from ontology is reverberation of a metaphysics that assumes an inherent different between human and nonhuman, subject and object, mind, and body, matter and discourse" ("Posthumanist Performativity" 829). However, onto-epistemology highpoints an agential realism in which both existing and knowing are the outcomes of "specific intra-actions matter" ("Posthumanist Performativity" 829).

confined in mortal flesh? While it is established that human species biologically belongs to a larger family of species called the animal kingdom, humans persist in positioning themselves as superior within the natural hierarchy. This logos[2], seen as unique to the human species, forms the basis of their hierarchical position in the natural order. To investigate the fictional reflections of how human species situates itself especially through the characters of mad scientists and their interactions with other humans, nonhuman animals, and hybridities of the two, this thesis aims to uncover the anthropocentric mindsets and discourses embedded in the human approach toward the nonhuman world within a posthumanist framework. By examining the literary examples of human-animal permeability, as reflected in H.G. Wells's *The Island of Dr. Moreau* and Ann Halam's *Dr. Franklin's Island*, this thesis highlights the fluid and blurred borderline between human and animal, leaving us with nothing but humanity's inherent animality challenging the conventional notions of separation.

Before human became 'human' as it is perceived in modern societies today, it was one of the members of a larger family called the Homo sapiens who are considered as the "naked ape" (Morris 9), because they had no fur to cover their bodies but there were "[o]ne hundred and ninety-two of them [who] are covered with hair. The exception is a naked ape self-named Homo sapiens" (Morris 9). Etymologically, Homo sapiens means the "sapiens (wise) of the genus Homo (man)" (Harari 11) and this wise man who are the "new human form eventually became the dominant one" (Facchini 10). Hence, it bears importance to understand that Homo sapiens were not alone; they cohabited the world with their siblings, other ape men. In his book *Sapiens: A Brief History of Humankind* (2011), Israeli historian and philosopher Yuval Noah Harari investigates the short history of human beings on Earth. Leading people to question their assumed uniqueness and reminding them of the evolutionary theory that Charles Darwin claimed in the nineteenth century, Harari writes,

> we are members of a large and particularly noisy family called the great apes. Our closest living relatives include chimpanzees, gorillas and orangutans. The chimpanzees are the closest. Just 6 million years ago, a single female ape had two daughters. One became the ancestor of all chimpanzees, the other is our own grandmother. (11)

[2] Intelligence and logos are separated from each other in this thesis on purpose as logos will be used along with the discussion of *Anthropos*. It is because intelligence may refer to other non-human animals' cognitive capacity as well as humans,' but only human beings can possess logos.

Homo Sapiens did not exist alone or in isolation as a unique specially crafted entity in the natural world. To put it differently, the world has been home to over a hundred species of apes that share remarkably similar physical and brain characteristics to Homo sapiens. As a result, the presence of Homo sapiens' evolutionary cousins on Earth highlights the common ancestry and diversity within the human family, refuting the idea of human exceptionalism.

In contrast, the term Anthropos carries a completely different meaning and encompass various connotations; being a socio-culturally constructed term, Anthropos, suggests the uniqueness and the hubris of human beings. Consequently, although the two terms might seem synonyms, and both of their etymology imply earth connection, a closer scrutiny reveals their divergent implications. Compared with the other Latin languages, such as Italian (*uomo*), French (*homme*), and Spanish (*hombre*), which all derived from the same root (*humus*), Greek word Anthropos is less associated with the earth connotation in a way to imply humbleness. It originates from the Indo-European root *andh*, which means 'bloom,' suggesting an image that blossoms from the ground in the form of a plant or a flower (Sax 23). According to Francesca Ferrando in order to be anthropos, one should not be a woman, child, slave, or barbarian —people who are not Greek— (*Philosophical* 90). Further, Ferrando states that Aristotle defined human (Anthropos) through "logos" "that is, speech, language, but also, reason" (*Philosophical* 90) as he wrote: "Man alone of the animals possesses speech [logos]" (qtd. in Ferrando, *Philosophical* 90). Logos, in essence, suggests the distinctiveness of humanity from nature, aligning humans with an extraordinary state of existence marked by the capacity of speech, particularly distinguished from non-human animals. That is, while in all other Latin derived languages 'human' is connoted with a creature that belongs to earth; a creature who is also humble and close to the ground, Anthropos constructs an entirely different meaning. A term as such does not imply a humble creature who is close to the ground; rather, it implies that human was formed by deities with full intent along with the purpose of blooming and blossoming in nature among other animals, which posits human at the center of all creation. Moreover, while Homo sapiens is a biological term which emphasizes the animality of humans, Anthropos, on the other hand, is a constructed term which bases its foundation on exclusions and hierarchical ordering —both among women and men, and human beings and other non-human animals.

Anthropos, indeed, is at the core of the term anthropocentrism and its ramifications. Establishing its origins on human animal prioritization over other animals and nature, as well as utilization and exploitation of them, anthropocentrism can be defined as a way of grasping of and acting towards nature and seeing all nonhuman animals and world as beings with lower faculties. Francesca Ferrando discusses the term Anthropos as "the etymon of many contemporary words, such as 'anthropocentrism' and 'anthropology'" (*Philosophical* 90). Accordingly, in their article titled "An Overview of Anthropocentrism, Humanism, and Speciesism in Critical Animal Theory," Adam Weitzenfeld and Melanie Joy define anthropocentrism as "the conceptualization of human existence as something superior and opposed to animals and animality" (3). A mis-conceptualization as such refuses its own Homo sapiens origins and neglects the fact that animals are, in fact, its cousins. As Weitzenfeld and Joy express, human-centered mindset re-orders the existence of humans and other animals in nature both ontologically and epistemologically in such a way to hierarchize the human, which draws a constructed and solid line between human and animal.

Anthropocentrism has been a widely researched and discussed topic among scholars of different fields (Boddice, Kernohan, Callicott, Weitzenfeld and Joy, DeLapp, Milligan, Mylius) each of whom studied on anthropocentrism from different angles, and they thus provide different stances about the term. Sharing some common points with each other in defining anthropocentrism, they aim at deciphering it at its core. In *Anthropocentrism: Humans, Animals, Environment*, Rob Boddice, the editor of the book, for example, explains anthropocentrism "as a charge of human chauvinism, or as an acknowledgement of human ontological boundaries" (1). In Boddice's account, then, anthropocentrism requires the discussions evolving around the questions of the human and human ontological boundaries, and it offers a hierarchical ontological pyramid in which it places itself at the top. Similarly, emphasizing the human as a member of Homo sapiens, Andrew Kernohan approaches anthropocentrism from biological evolutionary theory and posits that anthropocentrism "consider[s] only humans, member of the species Homo sapiens, to have moral standing" (9). In a parallel way, J. Baird Callicott posits that anthropocentrism "confers intrinsic value on human beings and regards all other things, including other forms of life, as being only instrumentally valuable" (299). Homo sapiens recognizes only itself as worthy of intrinsic value; thus, it has moral standing. Through

the elimination and subjugation of other animals' viewpoints and interests, anthropocentrism serves as an ideology that upholds the primacy and significance of human existence (Weitzenfeld and Joy 4). According to Kevin DeLapp, in a similar way, anthropocentrism is a normative construct that includes or conveys a set of viewpoints or attitudes which priorities one or more aspects of the human experience, perspective, or judgement, either directly or indirectly over others (37). Anthropocentrism, in short, serves as an ideology that upholds the existence of human beings ontologically and epistemologically than other inhabitants of nature, giving its way to the assumption that human beings can/should control the nonhuman environment.

In his book chapter titled "Speciesism as a Variety of Anthropocentrism," Tony Milligan associates the term anthropocentrism with speciesism claiming that "[a]nthropocentrism includes 'speciesism' and involves a difficult-to-define prejudice in favor of humans" (223). In this regard, anthropocentrism is an ideology that can only be defined through what the human is not, that is, it is not animal. Such an exclusionary term, thus, sees and accepts all other non-human nature expandable, edible, exploitable which paves the way for speciesism, with which Milligan defines the term. However, in his article titled "Three Types of Anthropocentrism," Ben Mylius problematizes the existing definitions of the term by claiming that they are inadequate, and they do not address the term thoroughly and states that "[t]hese definitions create the impression that anthropocentrism is exclusively, and inevitably, a matter of normative claims about human superiority" (161). In this way, Mylius's notion of anthropocentrism leads us to interpret anthropocentrism as a complex term that refers to the ontological and epistemological status of human beings. He also rejects the idea that the discussions of the notion are restricted solely to the domain of ethics. Declaring those impressions false, Mylius states that anthropocentrism can only be understood through its stakeholders like the terms Anthropos or anthropocene (165). Hence, he revisits the term and analyses it under three sub-categories: perceptual anthropocentrism, descriptive anthropocentrism, and finally normative anthropocentrism. In its broadest term, Mylius, with these three subtitles, argues that humans are naturally and intrinsically anthropocentric and that they are unable to separate from the essential elements that constitutes anthropocentrism (Mylius 167). It is because, from a philosophical point of view, human knowledge and logos are nothing without the five senses. Humans "necessarily receive the sense-data

that informs their paradigms via their —human— bodies, and thus via their human sensory organs —sight via the eyes, sound via the ears, smell via the nose, taste via the mouth, and touch via the skin" (Mylius 167). Thus, all our experience about ourselves and the environment around us are and doomed to be based on our own sensory mechanisms. According to this argument, then, whether it is deliberate or not, human beings are anthropocentric as it is like a natural instinct.

The roots of anthropocentrism in Western thought go back to the Great Chain of Being, or by its Latin name "*scala naturae*" (Nee 429), originated in Ancient Greece by Plato and Aristotle. The Great Chain of Being describes a hierarchical perception of life by categorizing the members of the Earth —including god and angels— in terms of their agentic powers in nature, "[t]his view saw the Universe as ordered in a linear sequence starting from the inanimate world of rocks. Plants came next, then animals, men, angels and, finally, God" (Nee 429). A classification as such portrays an arboreal and ordered relationship among the components of nature, which rejects the interconnectedness and a bidirectional impact of all life forms. Animals, according to this perception, had physical impulses and sensory qualities, but they were not as intelligent as humans, and they were not conscious of their surroundings. As this view favors, unlike humans, animals lack spiritual and mental qualities such as eternal souls, logos and the capacity to use language. Taken as the monument of humanist mindset, the Great Chain of Being sheds light on the perception of human and other animals' perceived position by the humanist mindset in the seventeenth and eighteenth centuries.

The Great Chain of Being, then, is a particularly good example of the fact that Anthropos defines itself through what it is not: it is not a divine being (a god or angel), and it is not a lower faculty of being (animal, plant, or mineral). For animals, on the other hand, since they lacked logos and eternal soul, they were categorized as inferior beings. Based on discrimination and othering, the Great Chain of Being, therefore, situates animals under humans, referring to their inferiority as species. Hence, speciesism, a term which refers to "the unjustified disadvantageous consideration or treatment of those who are not classified as belonging to one or more particular species," may be a descendent stance acquired from the Great Chain of Being and Humanist mindsets (Horta 244). Richard Ryder, who is an English writer and animal rights advocate, coined the term

'speciesism' in 1970 to describe a form of discrimination that favors members of a particular species (or a group of species) above others ("Speciesism Again"). Ryder sees speciesism as no different from other discriminatory practices and he extends the moral imperative in a way to include other animals as well. As Oscar Horta and Frauke Albersmeier discuss, the terminologies used to describe other types of prejudice, such as sexism and racism, are akin to speciesism (1). Ryder considered speciesism as illogical and totally selfish (*Speciesism, Painism* 76). According to Ryder's further explanation in his book *Victims of Science* in 1975, speciesism is "[t]he widespread discrimination that is practiced by man against the other species [and] speciesism and racism are both forms of prejudice that are based upon appearances" (5). In this regard, speciesism in Ryder's understanding is species-ism, a kind of biased discrimination based on the species. In the same year, Peter Singer defines the term speciesism in his book *Animal Liberation* as "a prejudice or attitude of bias in favor of the interests of members of one's own species and against those of members of other species" (6). According to Horta and Albersmeier, even though half a century has passed since Ryder's coinage and Singer's explanation, the term remains poorly acknowledged, with an exception of a number of academic and animal rights defenders (1). In 2010, Marc Bekoff edited a book titled *Encyclopedia of Animal Rights and Animal Welfare*, in which several scholars defined some crucial terms such as speciesism. Paolo Cavalieri defines the term as "an idea rooted in a biological category, namely, membership in the human species" (530) and argues that "it seems that racism, sexism, and speciesism are arbitrary discriminations" (528). In the same year, Oscar Horta, in his article "What is Speciesism?," puts that "speciesism is the unjustified disadvantageous consideration or treatment of those who are not classified as belonging to one or more particular species" (244). The discourse surrounding speciesism goes beyond basic bias against animals based only on their species. It is a vital component of our political and economic structures, deeply ingrained in our social, mental, and economic frameworks, and enduring via their integration (Noske xii; Torres 30). Favoring Noske's and Torres's arguments on speciesism, this thesis also argues that speciesism, as well as anthropocentrism, is embedded in human cultures, beliefs, ideologies, and biology. Just like racism, the prejudice of speciesism also bases its foundations on being different in appearance.

Both Barbara Noske's and Bob Torres's definitions of speciesism help move the discussion one step further and problematize this flawed stance, which is deeply rooted in our mindsets, social structures, and political-economical order. Their definition of the term bears particular importance for this thesis since they see speciesism as a feature interwoven within human nature. This thesis approaches both speciesism and anthropocentrism as two aspects problematically embedded in human culture, and criticizes speciesism particularly as a feature that began to evolve with the extinction of Homo sapiens' cousins on Earth —Homo neanderhalensis, Homo rudolfensis, among many others— a long time ago[3].

All the constructed terms like Anthropos, anthropocentrism, logos, as well as speciesism are revisited and problematized particularly through the theories of posthumanist thinkers and Critical Animal Studies scholars[i]. Theorists from both lines of thinking emphasize the need to revisit the concepts of human and animal since they propagate the idea that the subjugation of animals and all other members of nature to 'human' is wrong and has subversive consequences to all. In other words, both highlight the recent biological and technological assertion that 'human is also an animal,' subduing human exceptionalism and suggesting that human has developed and evolved together with all other members of nature. Posthumanism's take-over of the term anthropocentrism is significant as it posits for us the idea that anthropocentric worldview can be dangerous since it gives humanity the authority to utilize their agentic power on nature and to exploit its resources for their own benefit. Its assumed right to rule over nature might end up depletion of natural sources, destruction of habitats for human and nonhuman beings, and loss of biodiversity on Earth. Interpreting this potential threat that anthropocentrism has, Italian posthumanist philosopher Francesca Ferrando states:

> Once upon a time, there was a disease called anthropocentrism. It was the 21st century on planet Earth. Humans were healing; many were realising who they were. And so, they asked: "Who are You?" There was no reply; just mirrors, everywhere. And then, a clear answer resonated, in all voices, languages, and sounds, from everywhere: "I am You. You are Me. We are Everything." And so, we understood. And then, there was silence. ("Posthuman Healing and Revealing" 250)

[3] If these archaic human models, known as the siblings of humans, had not become extinct many centuries ago, would phenomena such as speciesism and anthropocentrism, which have catastrophic effects on all human animals and other animals, as well as on nature, have become human 'nature'?

Ferrando treats anthropocentrism as a disease and states that healing from this disease called anthropocentrism means realizing who you truly are: we are animals and animals are us. For her, only someone who has freed themselves from such a disease can realize and come to the conclusion that "I am You. You are Me. We are Everything" only if we are together ("Posthuman Healing and Revealing" 250). In other words, Ferrando points to the need to discern how this anthropocentrism disease and its symptom, human exceptionalism is critically damaging for human beings and how shifting to a posthumanist framework would heal the repercussions of this destructive approach. In this regard, such notion of human exceptionalism that is highly problematized by posthumanism leads us to a post-anthropocentric and post-dualist viewpoint. Ferrando's remarkable afterword sentences sound like a posthumanist manifesto or like a utopia whose characters have ruptured themselves from this disease only to become 'posthumans' and have gone through a realization process in their minds about their —as well as others'— existence in nature. It is important to note that the 'posthuman' that Ferrando describes here does not imply a biological bodily change, but the change here is the realization process itself in humans' mindsets. Approaching from a posthumanist perspective, therefore, healing from the disease and becoming-aware might mean revisiting the hierarchical ontological order set between humans and the rest of the animals and nature. In other words, posthumanism provides space to the discussions of problematic sides of human (Anthropos) and anthropocentrism by adopting a stance which radically dethrones humanism's figure of the human.

What does this new conception of the human, labeled the posthuman, provide us to shift our dominant anthropocentric perception of the human? Francesco redefines the idea of being post-human by transforming it into a utopian existence characterized by a profound shift in one's perception of life. Posthuman, according to Ferrando, "has become a key concept in the contemporary academic debate, to cope with the urgency for an integral redefinition of the notion of the human, following the onto-epistemological, as well as scientific and bio-technological developments, of the twentieth and twenty-first centuries" (*Philosophical* 1). In this regard, a redefinition and a relocation of the human notion is needed in order to keep pace with the scientific and bio-technological developments. Hence a novel term is found to describe this evolved —and still evolving— human. Through its multi-layered multidisciplinary fields of posthumanist

studies, posthuman has been diversely explained and not fixed to one definition. At this point, the term bifurcates in meaning: transhumanism's posthuman and posthumanism's posthuman.

Posthuman finds its expression in transhumanism theory as a super-human that is physically altered and enhanced via technological means. Transhumanism searches the solution in the agentive force of technology, which is considered as the anthropogenic means to achieve the 'becoming super-human' purpose with because it "refuses to see the human as a construct enmeshed with other life forms of life and treats technology as a means of 'adding' to already existing human qualities and of filling the lack in the human" (Nayar, *Posthumanism* 6). Thus, contrary to the posthumanist standpoint that draws the theoretical framework of this thesis, for transhumanism, technology is not a 'tool' but the 'ultimate end' with which "H+" (which means humanity plus) (Ferrando, *Philosophical* 30) would be created. Like Ferrando, who claims transhumanism is an "ultra-humanism" (*Philosophical* 33), Wolfe accepts transhumanism as an "intensification of humanism" (*What is Posthumanism?* xv), and Ağın names it as "Human 2.0" (26). Posthuman, for transhumanism then, refers to an amalgam consisting of human and machine and "the result of such technologically induced version of evolution is referred to as the posthuman" (Ranisch and Sorgner 8). This kind of a posthuman requires a bodily change, a kind of prosthesis into their body, and it is also "techno-deterministic, and techno-utopian, in its faith in technology's ability to ensure a certain kind of future" (Nayar, *Posthumanism* 8). From this understanding, it is possible to arrive at the conclusion that transhumanism's notion of the posthuman is an updated extension of anthropocentrism. In other words, it does not refer to a post-anthropocentric and post-dualist understanding and living in nature among other earthly creatures. By contrast, it is the technologically updated version of human-centeredness, still serving the ideology of anthropocentrism. Hence, transhumanism continues to embrace the anthropocentric ideals. From this viewpoint, then, it would be correct to draw a thick line between posthumanism and transhumanism as they do not share the same utopia on humanity, non-human animals, and ecology as a whole.

The posthuman that posthumanism refers to is quite different from the one that transhumanists suggest. This posthuman "destabilizes the limits and symbolic borders

posed by the notion of the human" (Ferrando, *Philosophical* 5). Therefore, it resembles more of a cognitive process rather than a physical augmentation. Rosi Braidotti, in her book titled *The Posthuman*, declares that "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" (2). It is important to emphasize that both Ferrando and Braidotti highlight a realization in our minds, which breaks any kind of border posed by conventional systems constructed by human beings. In this regard, being/becoming posthuman, in posthumanism's sense, requires no technological implantation in/on the human body. On the contrary, it is a process in which all kinds of anthropocentrisms and dualisms are addressed, deconstructed, and then revisited. In this sense of the posthuman, then, we can already be posthumans. In other words, being a posthuman does not refer to a future goal for posthumanism; by contrast, it refers to the state of 'post' for anthropocentrism, speciesism, and dualism. Hence, one can be a posthuman right now as it does not necessitate any advanced technological apparatus to implant the body.

Posthumanism is an umbrella term, bringing together a set of theories that encompass a wide range of interrelated disciplines: postmodern and continental philosophy, science and technology studies, cultural studies, literary theory, poststructuralism, feminism, critical theory, and postcolonial studies are all related to posthumanism. Therefore, 'posthumanism' is used in many circumstances as an encompassing term for concepts that explain, extend, or address the humanism issue (Ranisch and Sorgner 14). As a set of theories, posthumanism revisits the problematic human figure which both humanism and anthropocentrism put at the center. Ferrando, for instance, defines posthumanism "as a post-anthropocentrism, as a post-humanism, and as a post-dualism" (*Philosophical* 60). Ferrando defines posthumanism and posthuman as the transformation and the realization processes in mind, rather than the bodily alterations via technology. Robert Ranisch and Stefan Lorenz Sorgner provide another pertinent definition of the term: "posthumanism frequently question[s] [its] relationship to humanism and reconsider[s] what it means to be human" (7) in an uncertain and ever-changing world. Thus, posthumanism problematizes the universally accepted, generally white and male, human figure who "acquires transcendent values" (Braidotti 26). Although academics claim that posthumanism doesn't have a solid basis, Ihab Hassan, the

Egyptian-American literary theorist and writer, is the one who coined the term 'posthumanism' in his essay titled "Prometheus as Performer: Towards a Posthumanist Culture" in 1977. Hassan's description here shows similarities to Ferrando's stance when he declares that an urgent change is needed in people's minds to revisit their position on Earth:

> We need first to understand that the human form —including human desire and all its external representations— may be changing radically, and thus must be revisioned. We need to understand that five hundred years of humanism may be coming to an end, as humanism transforms itself into something that we must helplessly call posthumanism. (843)

Hassan's account of posthumanism reflects a Foucauldian attitude in the sense that Foucault also declared the end of man in *The Order of Things* in a way to suggest a metaphorical end to the constructed notion of humanity. It does not imply the literal end of human beings; instead, it implies a metaphorical end of the human which has been supported by a set of humanist ideas. From this point of view, then, their stance of posthumanism is more like posthumanism which emphasizes what comes after humanism, not human itself. To put it another way, in their understanding of posthumanism, the biological nature of human remains unaltered, yet a change occurs in the way they perceive themselves with the incorporation of technology.

Even though it has been argued that posthumanism's history does not have a definite beginning, middle, or end (Miah 89), there are philosophers who have tried to put posthumanism theory on solid background. For instance, Pramod K. Nayar finds the roots of posthumanism in "three major critiques of humanism: Foucauldian poststructuralism, feminism and technoscience" (*Posthumanism* 15). Showing similarities with Nayar, Adrian Franklin combines posthumanism with poststructuralist ideas and points to it as the origin of posthumanism. He states that "[p]osthumanism is a fast-growing area of ontological debate and research that has emerged from broad currents of poststructuralist thought" (1). Therefore, the core stances of posthumanism have shaped with poststructuralist ideas to deconstruct the human definition that humanist ideas favor. In tracing the roots of posthumanism, Stefan Herbrechter emphasizes its emergence in response to Nietzsche's critique of moral principles (31), while Neil Badmington expands the historical context by highlighting Marx's dismissal of a fundamentally social being and Freud's groundbreaking insights into the impact of unconscious drives (4–7). In this regard, posthumanist thinkers have attempted to put the theory in a solid background yet,

it is quite challenging to base the ideas that posthumanism favors on only a sole stance. Considering that posthumanism deconstructs the concept of human, though, it becomes evident that posthumanism and poststructuralism support each other. Cary Wolfe, who is one of the leading philosophers of posthumanism and critical animal studies, suggests tracing posthumanism back to

> the Macy conferences on cybernetics from 1946 to 1953 and the invention of systems theory involving Gregory Bateson, Warren McCulloch, Norbert Wiener, John von Neumann, and many other figures from a range of fields who converged on a new theoretical model for biological, mechanical, and communicational processes that removed the human and Homo sapiens from any particularly privileged position in relation to matters of meaning, information, and cognition. (*What is Posthumanism?* xii)

Recently, then, the human figure has been dethroned from its self-proclaimed and self-structured position in nature with the help of science and technology. Wolfe considers human nature problematic and rejects the privileged human position. Within this perspective, Wolfe's idea matches the problematic position of the human subject of posthumanism. Hence, posthumanism offers a "new conceptualization of the human" (Nayar, *Posthumanism* 3). With grand novel developments in science and technology, as well as the remarkable studies of zoology field, it becomes clearer that the features we consider 'humane' —"altruism, consciousness, language"— seem not so unique to human, as they are also "properties exhibited by animals" (Nayar, *Posthumanism* 3) as well as organic and inorganic hybridized elements of technology. As Nayar puts, posthumanism "[a]s a philosophical, political and cultural approach," "addresses the question of the human in the age of technological modification, hybridized life forms, new discoveries of the sociality (and 'humanity') of animals and a new understanding of 'life' itself" (*Posthumanism* 3). In other words, posthumanism theory invites human beings to revisit the exclusionary classifications that are set to define human, as well as other animals and nature, and to deconstruct such conventional ideologies to redefine them as being posthuman.

Posthumanism's ontologies and emphasis on the connectedness of all living beings are epitomized in the rhizome metaphor, developed by postmodern philosophers Gilles Deleuze and Felix Guattari. In *A Thousand Plateaus: Capitalism and Schizophrenia* Deleuze and Guattari introduce the concept of the rhizome to explain the non-hierarchical nature of knowledge. Cambridge dictionary explains the rhizome as a root plant that grows horizontally along or under the ground and produces roots and leaves

("Rhizome"). It has multidirectional growth pattern, making it look like an intertwined web of being. Although Deleuze and Guattari use the rhizome as a metaphor to reconsider the nature of knowledge, it is functional to explain posthumanism's idea of relocating the ontological presence of each inhabitant on Earth. It is because the growth pattern of the plant shows resemblance to the non-hierarchical ontologies that posthumanism offers in relation to human and nonhuman beings. Deleuze and Guattari describe the details about the rhizome metaphor as follows,

> unlike trees or their roots, the rhizome connects any point to any other point, and its traits are not necessarily linked to traits of the same nature; it brings into play very different regimes of signs, and even nonsign states. The rhizome is reducible neither to the One nor the multiple … It is composed not of units but of dimensions, or rather directions in motion. It has neither beginning nor end, but always a middle (milieu) from which it grows and which it overspills. (21)

This botanical organism, which multiplies in the transition between the flower and the roots, represents plurality in the absence of a common generative impulse, according to Deleuze and Guattari. Rhizome, then, dissents from the hierarchical layers of the classical Cartesian tree, which locates human being at the top of the evolutionary ladder; instead, it affirms the "radicle-chaosmos" (Deleuze and Guattari 6). Deleuze and Guattari's description of 'radical chaosmos' enables readers to comprehend how it does not point to a fixed starting and an ending line, as opposed to tree, and how "any point of a rhizome can be connected to anything other and must be" (7). Driven by such an approach, it seems that Deleuze and Guattari's use of the rhizome metaphor is the appropriate link to understand post-anthropocentrism and post-dualism, as posthumanism itself, just like the rhizome, is in favor of plurality.

Post-anthropocentrism, then, as an aspect of posthumanism, might find its resonation with what Deleuze and Guattari offer in relation to the rhizome metaphor. In other words, post-anthropocentrism posits that human cannot be separated from and prioritized among all other inhabitants on Earth as their biology does not allow that to happen. The same way that rhizome "has multiple entryways" (Deleuze and Guattari 12) so does the human body with its permeable and vulnerable nature. It is prone to change and transformation in the face of nature; in other words, it is fluid. As Pramod K. Nayar expresses in his foreword of *Posthuman Pathogenesis*, "[t]he 'posthuman' —a human inhabited by multiple nonhuman forms including bacteria and viruses— continuously emerges through time and space and, therefore, this new ontology has irreversibly altered

the presumed human sovereign control over temporal and spatial boundaries" ("Posthumanism in the Year of COVID-19" xv). As Nayar states, 'posthuman' for posthumanism is a 'becoming-being' who is aware of the fact that it is a part of a whole called nature. The boundary between human and other organisms in nature is temporal and spatial as we are made of flesh just as every other animal and microscopic organism living in nature. Realizing that humans are essentially connected to nature and that there are microscopic organisms living inside of us, including bacteria and viruses that can weaken our immune systems and cause disease, is a significant step towards adopting a post-anthropocentric viewpoint.

In order to improve our comprehension of the posthuman notion, it is necessary to examine the implications of post-anthropocentrism. Post-anthropocentrism enlists not only scientific and technological studies but also "new media and digital culture, environmentalism and earth-sciences, biogenetics, neuroscience and robotics, evolutionary theory, critical legal theory, primatology, animal rights and science fiction" (Braidotti 58). Post-anthropocentrism can be found in any field of study that deconstructs the human's hierarchical position both technologically and biologically in relation to non-human animals and cybernetic organisms.

Braidotti finds Nikolas Rose's *The Politics of Life Itself* as the hallmark of post-anthropocentrism (Braidotti 60). Rose argues that "[a]s biopolitics becomes entangled with bioeconomics, as biocapital becomes open to ethical evaluation, and as ethopolitics becomes central to our way of life, new spaces are emerging for the politics of life in the twenty-first century" (8). The concept of 'life' is presented as an ongoing, interactive, and open-ended process rather than as an exclusive property or inalienable right of one species, that is, the human, over all others. The distinction between the portion of life — both organic and discursive— that has historically been reserved for Anthropos is bios. The broader scope of animal and non-human life, also known as zoe, is displaced by this vitalist approach to living matter (Braidotti 60). In order to connect it with the rhizome and the reinterpretation of the meaning of "life," they thus challenge Protagoras's theory that "man is the measure of all things," which is also supported by anthropocentrism, human exceptionalism, and humanism. Instead, the revisited conception of life, just like the rhizome, implies a multifaceted, non-hierarchical, pluralistic, and flat ontology, where

everyone is equally and intrinsically valuable. Francesca Ferrando provides a different approach and argues that post-anthropocentrism is one of the roots of philosophical posthumanism. She explains: "Post-anthropocentrism refers to decentering the human in relation to the nonhuman; it is based on the realization that the human species has been placed in a hierarchical scale and has been granted an ontological privilege in the large majority of the historical accounts on the human" (*Philosophical* 54). Therefore, post-anthropocentrism pulls out the transcendental ladder by which humans elevate themselves from the mud of the world (Broglio 37).

Post-dualism is another aspect of posthumanism to understand what the theory means by posthuman, and it is a necessary final step in the deconstruction process of the 'human.' In line with post-anthropocentrism, the term suggests a flat understanding of ontology, where each member of nature is valued for their intrinsic value. It aims at bringing a holistic and non-dichotomic way of grasping nature as a response to what dualism suggests. Dualism, which identifies human and life through dichotomies such as nature/culture or human/animal, prioritizes human, culture, logos, and every other thing that belongs to the human above others. This dualistic mindset that automatically attributes importance to some qualities (white, human, male, culture) over others (black, non-human, female, nature) is the core point which posthumanism deconstructs. In other words, post-dualism dismantles the perception of self and other; instead, it favors multiplicity, co-existence, and interconnectedness.

There are two ways to deconstruct the human offered by post-dualistic thinking: via biology and technology. Humans are genetically linked to everything in nature. Thus, it is hard to separate them from other living organisms. In other words, biological bodies of each living being, whether human or non-human animal, are permeable. That is why there is a separate classification as zoonotic diseases. As one of the leading Turkish environmental humanities scholar Serpil Oppermann states, "bodies are no longer seen as purely discursive constructs, nor as biological substances with boundaries" (61). Instead, bodies are, to use Alaimo's words, in "interconnections between various bodily natures" (2). Humans, for instance, cohabit their bodies with other micro-organisms, bacteria, and germs. So, human body is in relation with many organisms that dwell in/on it. Biology, then, is an essential way to deconstruct the notion of the human. Even though

considering that biology also gave way to promotion of such distinctions, configuring how human beings evolved as a species due to their distinctive qualities, or, as it was once used to categorize and distinguish women and men from each other, posthumanist scholars in the twenty-first century now use biology outside of this context and deconstruct it. In other words, posthumanist thinkers reinterpret the concept of biology and use this deconstructed version of it to blur the boundaries between human and animals.

When it is interpreted as such, the dualism between human and animal disentangles itself from prioritizing human over non-human animal. From land animals to sea creatures, or from microscopic ones to predators, human beings have been evolving with, in Donna Haraway's term, their "companion species" (*Companion* 2), that is, animals. Therefore, there is no such order of ontological value among all living beings. Post-dualism, then, embraces a monist ontology in which there is no hierarchical or arboreal growth on evolutionary ladder, but instead an interconnectedness just like the rhizome itself. We are all connected to one another. To put it another way, for post-dualism, the radical disfiguring of posthumanism shall not postulate any kind of definite dualism, assimilation, or monopolization (Ferrando, *Philosophical* 189). In contrast, post-dualism shall assert a constant deconstruction and revisiting of the traditionally acknowledged dichotomies. Only by deconstructing the traditional dichotomies, then, a just world may be possible, not only for humans but also for other beings in nature.

The other way to deconstruct the notion of the human is through technology. From primitive tools that Homo sapiens used, to the artificial intelligence, bioengineering, smart phones, and laptops, technology has always been part of human societies. While technology and human life are so intertwined today, it is important to think about the place of technology in our lives, how we perceive the cluster of tools that technology has introduced into our lives, and in what role we situate them. Posthumanism locates "technology not as a mere prosthesis to human identity but as integral to it" (Nayar, *Posthumanism* 9) and it discerns technology —like all other non-human actors in nature— as co-evolving and sharing ecosystem in a mutual relationship with human. Based on such understanding, it would not be wrong to state that technology has evolved together with humans, and humans have evolved together with technology which is, then,

based on a mutual relation. A perception as such is the exemplification of a monist ontology that is at the root of posthumanism because it does not accept technology as the 'other' which should be subjugated by humans. In addition to this, when it comes to technology, it is worth examining the standpoints of two the terms: posthumanism and transhumanism, which may seem close to each other but in fact contain many contradictions in meaning.

Posthumanism's perception of post-dualism rejects anthropocentrism, dualism, and all other human-centered stances that humanism idealizes. It sees technology as one of the stakeholders of humanity with which they all evolved together. Overall, concerning the technological aspect of post-dualism, it should be emphasized that "post-dualism, [is] in a comprehensive attitude which approaches the human as an open signifier, in its historical actualizations and also in its potentialities" (Ferrando, *Philosophical* 99). For posthumanism, human is an open term; human body is an open biological site. They are only 'becoming' —or evolving— with other —organic or inorganic— actors of nature. Post-dualism is essential for the discussion of posthumanism because even if anthropocentrism is somehow overcome one day, novel forms of discriminations and dualisms can/will emerge if we do not address and point to the most ingrained form of dualistic mindsets or the newly emerging possible ones (Ferrando, *Philosophical* 189). As examples of possible future dualities that may be subject to discrimination, Francesca Ferrando lists:

> We can think, for instance, of discrimination against future posthumanities, as in the case of the progenies of those humans who may migrate to space in the near future, and whose biology, and technology, may adapt, generation after generation, to conditions in space, eventually evolving into different species … we can think of discrimination against humans who were not genetically "enhanced" … We can think of discrimination against intelligent machines by (some) humans; and also, vice versa, we can think of discrimination against humans by (some) intelligent machines, as in the case of AI takeover scenarios. This is why it is extremely important to take into account post-dualism as part of the philosophical posthumanist approach. (*Philosophical* 189)

In this sense, post-dualism refers to converting not only the current dualisms such as woman/man, human/animal, or human/machine, but also to any possible future dualisms that may emerge with the changing and evolving life in line with human and technology. In other words, post-dualism affirms the idea of living on an egalitarian ground together with all other coexisting components of Earth that are coevolving with human beings.

The concept of trans-speciesism has junctures with post-anthropocentrism, post-dualism, and indeed posthumanism in general, and it offers a viable frame to discuss the idea of the posthuman. Trans-speciesism endows social and moral justice for all species, expanding the discussion of posthumanism. It advocates for animal rights and underscores the physical as well as psychological similarities between humans and animals. The most apparent of these junctures is that trans-speciesism decenters anthropocentrism, anthropo-normativity, and other notions brought by them, such as speciesism. Speciesism, already discussed as an ideology, is based on a hierarchical order of nature in which human is separated and treated as superior to other animals while trans-speciesism puts forward that "we are in the process of re-examining fundamental assumptions that we took for granted —specifically those that assumed animals as 'less than' humans and are based on animal exploitation" (Bradshaw, "Trans-species Living"). Within this context, G.A. Bradshaw displaces the concept of the human in their theorization of trans-speciesism, suggesting that a trans-species social justice and trans-species psychology concerns should be pursued. G.A. Bradshaw, who is the founder of trans-species psychology field, further expresses that it is wrong to discuss the concept of psyche only in relation to human individuals. She states that other animals (in Bradshaw's case especially elephants), can experience psychological traumas or stress disorders similar to those of humans. Therefore, she argues that the concept of psyche is not exclusive to humans and extends it in a way to include other animals. Bradshaw emphasizes the assumption that only human beings have sentience, culture, and all the other characteristics that make them humans and that they use them to assert human privilege over other animals (Bradshaw, "Trans-species Living"). In other words, trans-speciesism aims to overthrow the human domination, brought about by anthropocentrism and speciesism, by introducing biological and neuroscientific evidence which supports to eliminate supposedly human uniqueness. Further, G.A. Bradshaw and Mary Watkins argue that "[d]efinitional boundaries are beginning to blur even in science where the human-animal divide has been strongly enforced. For example, stem cell researchers worry about mixing neuronal and psychological capacities of humans with other species in the creation of hybrid chimera" ("Trans-Species Psychology" 4). Recent studies in biology and psychology have effectively destabilized the deeply entrenched notion of human exceptionalism. Instead, a trans-species psychology has emerged, emphasizing a

broader perspective on social and political justice that transcends species boundaries. This shift removes the notion of human superiority, urging us to consider the interests and welfare of other animals as well. According to Bradshaw and Watkins's statement, an Australian anthropologist admit that "it could be possible for humans and chimps to have sex and produce offspring, although there would be ethical problems" (qtd. in "Trans-Species Psychology" 4). That is, both cognitive and physical boundaries along human and animal borderline have become blurred with the recent findings.

Lori Marino, who is a neuroscientist working on animal behavior, provides another example that shows the blurred boundaries among species, and she problematizes Aristotle's *Scala Naturae*, which suggests the idea that the complexity, perfection, and value of nature can be structured on a predetermined scale (Marino). Moving from that, Marino finds evidence through the topics of language and representation, science, and ethics to reveal that Scala Naturae is still the main paradigm and offers trans-speciesist suggestions. She explains the terms as such: "[T]rans-species perspective derives from and encompasses Trans-Species Psychology, a new paradigm of science, knowledge, and culture established by psychologist/ecologist Gay Bradshaw" (Marino). Marino observes how the language and its representation of other animals have been beleaguered by pointing to the pronoun use in English language. Instead of attributing individuality with 'she' and 'he' to human animals, the pronoun 'it' is used when talking about both an inanimate thing and other animals. However, the true relationship between species would be represented in a trans-species language without the introduction of hierarchical and arbitrary concepts of value. To build a trans-species perspective on nature, therefore, language should be one of the first aspects to revisit. Therefore, in order to build a trans-species social justice in which other animals and other components of nature are not hierarchically devalued, language should be critically scrutinized to realize how anthropocentrism is embedded in our mind, therefore, in our language.

In line with posthumanism's other aspect, post-dualism, Marino also questions ethics in which she argues that the long-believed Scala Naturae has been justifying the relationship between humans and other animals, characterized by hierarchies, objectification, exploitation, and maltreatment (Marino). Animal individuals have been exploited in many ways by human individuals, and it is not considered as problematic in

this sense. For example, animals are victimized for countless research that are too cruel to test with human beings. On the contrary, a trans-species perspective suggests that we should move away from this ethical double standard in science and education. A trans-speciesist turn would then require radical changes in language, science, and ethics, as well as in our perception towards nature and other animals, but most importantly, a change is required in the perception of the human itself.

Apart from the theoretical trans-speciesism which demands a post-anthropocentric and post-dualist stance to be able to embrace the trans-species psychology, the term can also refer to a physical interspecies, commonly known as hybrid life forms in which "two forms join to create a form that is neither the one nor the other" (Hix 273). In this regard, hybrid life forms, that is, the interspecies living beings, can be considered as a new and posthumanist suggestion to the problematic nature of the term 'human' since these interspecies are neither human nor animal —nor machines. The etymological definition of 'hybrid' is rooted back in Latin hybrida, meaning 'mixed blood' (Puleo 350), referring to the amalgamation of two or more things. Though the experiments from which some of these trans-species hybrid life forms emerge are anthropocentric, they transgress the biological, cognitive, as well as the categorical borderlines between human and other animals because the resulting products are 'trans-species,' that is, neither human nor animal. Whether created through cloning or spontaneously occurring breeding, "living" hybrids typically address scientific advancements that directly influence or have the potential to affect human bodies. Also, they can arouse terror and an uncanny feeling for human beings. In his renowned 1919 essay, "The Uncanny," Sigmund Freud explains that uncanny:

> undoubtedly belongs to all that is terrible—to all that arouses dread and creeping horror; it is equally certain, too, that the word is not always used in a clearly definable sense, so that it tends to coincide with whatever excites dread … One is curious to know what this peculiar quality is which allows us to distinguish as 'uncanny' certain things within the boundaries of what is 'fearful.' (1)

Freud thus anticipates the presence of the uncomfortably familiar expressing postmodern and posthuman uncertainty (Desblache 248). These posthuman uncertainties might be epitomized by scientific human and animal experimentations which fuse both species. Experiments like human-pig, human-cow, human-chimpanzee, or human-mice have been

carried out by various scientists[4]. Trans-genetic experiments as such have gained acceleration especially in the twentieth and twenty-first centuries with the fundamental developments in technology and biology. The results of such experimentations show that a human cell can be grown in other animals' bodies. Accordingly, different questions have been raised about these life forms whether they are human, animal, or neither. For example, in *Is This Cell Human Being* (2011), Antoine Suarez and Joachim Huarte investigate the perception of hybrid life forms and conclude that these hybrids cannot be called 'persons' as they lack consciousness, and further, they claim that such life forms put jeopardy on human uniqueness (178-179). Ironically, they are correct on the subject that human uniqueness is in jeopardy but not because of the possible outcomes that are shown by these experiments; rather, because of the recent biological developments which show that human biology does not contain anything different from those of other animals. In this regard, the fact that physical trans-species life forms, that is, hybrids, blur the biological and definitional distinctions between human and other animals. Also, since they are both familiar and unfamiliar, they initiate an uncanny situation in which both the reactions of fear and excitement are simultaneously aroused. Further, it is correct that new hybrid life forms cannot be called 'persons;' however, it is not because they point to a lower life form, but because they are neither animal nor human, but both.

Furthermore, in the book titled *Chimeras, Hybrids, and Interspecies Research* Andrea L. Bonnicksen explains the differences between a hybrid life form and a chimera, which is composed of different human or animal cells[5]. To Bonnicksen, there is a significant point that divides chimeric and hybrid life forms: Whereas chimeras are possible to be produced in laboratories, "hybrids are rare; they are not easy to create, and there is little need if any for them in biomedical research. The imagined hybrid, however, presents dramatic fodder for fiction and fantasy, especially as typified by the humanzee, which would in fact meet the criteria for a hybrid" (59). Still, creating a hybrid life form "cannot be ruled out as impossible" (Randerson). Further, Bonnicksen divides hybridization process into two poles: one side is microscopic life form called "humster,"

[4] Russian scientist Ilya Ivanovich, for example, tried to make a 'humanzee' in 1910 (Felton). In 1998, American scientists tried to make a human-cow hybrid by fusing a human cell with a cow's egg cell (Connor). However, it did not live long.

[5] The representation of chimera traces its roots back to mythological narratives which refers to the amalgam of different animal limbs like lion-goat, or lion-snake.

and the other one is the "fantasy with a spooky outcome" (63) called "humanzee." According to Bonnicksen, while the hybridization of humster does not pose an ethical dilemma —because it is a microscopic life form and the species are distinct from each other—, the humanzee would pose substantial ethical dilemmas (63). Further, Bonnicksen is aware of the fact that a possible human-animal hybrid life form "would be unpredictable in that it would reflect fifty-fifty genetic split. One could not predict which genes the offspring would inherit from the chimpanzee and which from the human" (68). In this regard, as a potential hybrid life form would be composed of fifty percent human and fifty percent other animal DNA, the biological as well as the categorical distinction between human and other animal(s) is blurred by this posthumanist potentiality, which decenters human exceptionalism.

Besides the laboratory experiments in the pursuit of 'creating' a physical trans-species life form which consists of human, other animal as well as technological instruments, researchers in the essay titled "Technical Note: Chromosomal and mtDNA Analysis of Olive," have attempted to determine whether the chimpanzee named Olive (who displays human-like traits) is the result of a human-animal hybridization through observational and DNA experiments they conducted on the animal. He was thought as the 'missing-link' or a 'humanzee.' The result is that such human-animal hybridization is not the case (Ely et al. 402). Even though Olive is not a humanzee, the important point here is that Olive's human-like traits create a perplexity about alleged unique-to-human-traits when they are observed on a chimpanzee. An instance as such causes uncanniness, blurring long-established and universal human traits. Therefore, biology stands out as an appropriate tool to decenter ostensible human uniqueness as all those mentioned experimentations clearly show the fact that humans' biology is not as exceptional as once believed to be.

In this context, considering the in-betweenness and therefore problematic nature of the human species, human exceptionalism is put into peril by the very phenomenon of hybridity (Hix 276), and they can be considered as a posthuman solution that eliminates this conceptual ambiguity. In other words, hybrid life forms do not restabilize the hierarchy among species, superiority or dualism, the features which are the outcome of anthropocentrism and humanist stances. Instead, they are characterized by their openness

and permeability. They are neither human nor animal; they are neither and both at the same time. The creative imagination of humanity in terms of hybridity can be utilized to overcome the constraints of the human exceptionalism that has dominated Western civilizations at a time when life cannot be associated with fixed identities or with firm ideas (Desblache 249). That is, in light of the posthumanist redefinition of human and other animals, the examination of trans-species (both theoretical and physical representations) that transgresses the human and other animal borderline is an attempt to bring a posthumanist revisiting of humanities' relationship with non-human environment. Hybridity, indeed, is a proper implement both to displace human exceptionalism and to invite humanity to reconsider what it means to be human animal or other animals as Hix indicates:

> In hybridity, the border between system and environment is not breached, it's just not clear where it is or whether there is a border. If I'm part human and part wolf, am I part of 'nature' or not? My humanity as that which permits me to move through nature and look out at it, is compromised. Thus, hybridity's occurrence as a condition rather than as an event: it is not that the border between system and environment has been breached at some point, but that, as an ongoing condition, the border (insofar as there is one at all) is porous or unmarked. (275)

As a posthumanist attempt to indicate a solution to the problematic nature of the human species, hybridity offers no fixed boundaries. To such an extent that, as Harvey L. Hix here states, in the case of hybrid life forms, it gets intricate and obscure to distinguish where these boundaries separating human and other animal begin or end, or even whether these boundaries exist at all. Abovementioned experimentations on both human and animal clearly disclose the fact that there is no absolute borderline between human and other animal both in terms of biology and cognition. Biology and technology have radically deciphered the fact that human body is in connection with non-human environment, that is, human has been evolving with its "companion species" (Haraway, *Companion* 2); therefore, it is permeable and open to external non-human agencies. If a human can be partly mechanic and partly human, or partly animal and partly human, then the overvalued human part does not look so prodigious after all (Hix 276). Hence, hybridity, as a brand-new species, can be offered as a novel and non-problematic way of being since human beings are intrinsically and inherently anthropocentric and speciesist, which can be toxic to both human and nature. In other words, speciesism, domination, and marginalization for everything that does not fall under the categorization of 'human,' which has been brought about by the humanist and anthropocentric stances for over

centuries, should be considered problematic and destructive towards the whole nature. By nature, each individual member living on Earth is included whether human or other animal with a pluralistic, posthumanistic, and trans-speciesist stance. In other words, human individuals are regarded as self-destructive (as it harms his home oikos, as well as his companions). Hence, a solid focus on hybridity is proposed as a solution to the problem of the in-betweenness of human species. As fusions of human and other animals, as well as technological instruments, hybridity leaves nothing to discriminate against as a hybrid is the amalgam of it all.

Bearing in mind what has been discussed so far, it would be better to remember that this thesis recognizes the terms Anthropos, anthropocentrism, and speciesism as problematic and offers a new solution to them from a posthumanist perspective by introducing the concepts of post-anthropocentrism, trans-speciesism, and hybridity. Post-anthropocentrism refers to an epiphanic change in mind in which human superiority and uniqueness are destroyed, and as a result of this epiphany, interconnectedness, and complex web of all living beings on Earth are established on a monistic ontology. In literature, it is possible to trace the reflections of the trans-species hybrid life forms which are attempted to be created in real life. The hybrid beings that appear in numerous works of literature and mythology around the world represent millennial concerns with the blurring lines between human corporeality and subjectivity as well as humanity's tumultuous relationship with animality (Coleman 694). The mingling of the human's "schizoid quality" (Pollan 306) with other animals and the power of creative thinking, as well as the fact that literary works narrate stories and employ characters that reflect their own period, make it especially necessary to scrutinize hybrid life forms in literary works. In her article titled "When Science Blurs the Boundaries," Cat Yampell analyzes hybrid life forms in two young adult science fiction novels. According to her:

> Literature reproduces social disruptions as well as hegemonies, representing voices of those who cannot speak for themselves as well as the voice of the dominant, speciesist, Western, patriarchal majority. It provides an arena in which science's anthropocentric experiments fail, nature/culture boundaries blur, borders between separation and purification dissolve, and hybrids proliferate. (Yampell 207–208)

Parallel to what Yampell suggests here, it is possible to claim that literature, especially science fiction genre, provides an open and free space for authors to reflect its era's

scientific concerns, social anxieties, and dominant attitudes towards other animals and nature. The themes related to animal studies are richly explored in science fiction that deals with such topics as extraterrestrial contact, animal intellectual transcendence, hybrid beings, human development or degeneration, machine and other alternative sentience, warfare between the sexes, economic and class strife, and even ecodisaster (Gordon 332).

Within the light of these theoretical ideas, this thesis explores H.G. Wells's *The Island of Dr. Moreau* (1896) and Ann Halam's *Dr. Franklin's Island* (2001) as examples of science fiction novels that particularly deal with issues of animal as well as human alterity (that is the hybrids), human devolution and evolution that ends up with blurring the physical and cognitive borderline between human and animal. Both novels feature a mad scientist who attempts to transgress the borderline of human and animal categorizations by conducting different experimentation on nonhuman animals (in Dr. Franklin's case, both on animals and humans), which forge new hybrid life forms. Even though hybridity is an attempt to solve the problematic and exclusionary nature of the term "human," which categorically prioritizes the human over other animals, both leading mad scientists fail at this attempt as they cannot rupture themselves from an anthropocentric mindset. In this regard, both Dr. Moreau's vivisection and Dr. Franklin's transgenic experiments, whose outcomes ironically swing between posthuman potentialities, remain anthropocentric since they do not take animal welfare into consideration and do not appreciate hybridity as a state in which one remains neither human nor animal, uncanny.

The first chapter starts with a short introduction to the novel along with the portrayals of human and animal relationships in *The Island of Dr. Moreau*, analyzed in relation to its anthropocentrism through a posthumanist critical framework. Dr. Moreau as a character embodies the extension of the anthropocentric notions, which promote the human as the measure of everything. In other words, the mad scientist of *The Island of Dr. Moreau* highlights the strict ethical and ontological boundary between human and animals in the manner to prioritize humans over animals and to promote the "human" as the norm. In Wells's narrative, however, the mad scientist Dr. Moreau blurs human-animal borders physically and intellectually by creating The Beast Folk via vivisection. Hence, even though the novel strictly epitomizes the anthropocentric ideals which

promote human uniqueness, speciesism, and anthropocentrism in the prevailing context of the time, the novel is of significance in that it transgresses boundaries between human and animal and prompts the reader to ask unconventional questions about human and animal existence.

The second chapter examines the twenty-first century allusion of Wells's novel, *Dr. Franklin's Island*, along with some radical changes, to reveal the shifted representation of anthropocentrism, the trope of mad scientist character, and the recent discoveries about the animal intelligence, and the other cognitive and biological similarities between human-animal with reference to relevant twentieth and twenty-first century scientists. Ann Halam's novel represents similar traits in terms of human and other animal relationship, yet, even though Dr. Franklin seems to decenter the anthropo-normativity suggested by Wells by turning human beings into animals via transgenic experiments, thus creating a brand-new hybrid life form, his ultimate goal is not free from anthropocentric qualities. The second chapter concludes with the argument that even if anthropocentric undertones are still prevalent in the novel, it introduces hybridity as a state that is more appreciated than the finite and frail human condition. Hence, the second novel addresses the gaps the first one left unexplored.

As a result of the posthumanist readings of these two novels, this thesis argues that both novels show us that human is but an animal, which is a conclusive remark indicating the problematic nature of the term "human." It has never been an inclusive term; on the contrary, it is a term the foundation of which is constructed upon exclusion and othering. Therefore, while the conventional anthropocentrism and speciesism are straightforwardly evident in *The Island of Dr. Moreau* with the Beast Folk, who ironically blurs the assumed physical and cognitive boundaries between human and human. The blurring and transgressed boundaries are even further observable in the novel with the devolution not only of the Beast Folk but also of Prendick, who finally feels as an outcast among human society after Moreau's death. In *Dr. Franklin's Island*, on the other hand, which portrays hybridity as a preferable state than being a human with its trans-species living beings, represents a shifted and more radical anthropocentrism as the norm. In conclusion, this thesis argues that trans-speciesism and hybridity can count as effective attempts to revise and deconstruct the exclusionary, therefore speciesist, nature of the

term human, since hybrid creatures are neither human nor animal; they are both human and animal.

CHAPTER I

The Humanized Animals in *The Island of Dr. Moreau*

I was almost as queer to men as I had been to the Beast People.

—H.G. Wells, *The Island of Dr. Moreau*

This chapter explores H.G. Wells's commonly known dystopian science fiction novel *The Island of Dr. Moreau* (1896) in terms of the human and animal relationships represented by a typical nineteenth century mad scientist character, Dr. Moreau. The novel begins with Edward Prendick, who is shipwrecked on a ship called Lady Vain and after an agonizing and laborious process, he finds himself at Dr. Moreau's enigmatic Island with the help of Dr. Moreau's assistant Montgomery. Being always cautious around Dr. Moreau, Montgomery, and the creepy creatures he sees all the time, Prendick senses that something awry is going on at the island of Dr. Moreau. He believes that these bizarre creatures are the animalized humans who are the outcomes of Dr. Moreau's experiments. Thinking that he is too going to be a wretched experiment subject for Moreau's experiments, Prendick decides to escape from this horrific island as he wishes to remain human. Shortly after, Montgomery, followed by Dr. Moreau, catches Prendick and explains reality and what these creatures are. These creatures, namely the Beast Folk, are, contrary to what Prendick assumes, the humanized animals of Dr. Moreau. That is, Dr. Moreau reveals that he has been carrying out vivisection experiments on animals to make them human both in shape and mind. Upon learning the truth that these creatures are only animals, Prendick reassures his own security on the island. As can be observed in its brief plot summary, the novel suggests anthropo-normativity as the norm, as well as the self-centered motivations of these experiments, which drive Dr. Moreau to vivisect animals, and make the values represented in the novel anthropocentric and speciesist. Hence, in this chapter, the mindsets, discourses, and the values in *The Island of Dr. Moreau* are problematized and are considered anthropocentric since the novel discriminates every other thing that does not fall under the category of human, even

though the Beast Folk is the representation of blurred boundaries. Having done all these, the novel does not give voice to post-dualistic as well as post-anthropocentric points of view. Ergo, the aim of this chapter is to investigate this anthropocentric and speciesist fictional representations of the relationship between human and other animals in *The Island of Dr. Moreau* from a posthumanist perspective to shed post-dualistic and post-anthropocentric light on the discussion. Moreover, focusing particularly on the characters Dr. Moreau and Prendick matches perfectly with the argument of this chapter because their reactions and mindsets entirely reflect the nineteenth-century understanding of human and other animal as Dr. Moreau represents the nineteenth-century mad scientist stereotype who carelessly vivisects animals without any concern for ethical interference.

Besides *The Island of Dr. Moreau* (1896), H.G. Wells's other novels such as *The Time Machine* (1895), *The Invisible Man* (1897), *The War of the Worlds* (1897), *First Men in the Moon* (1901), *The Sleeper Awakes* (1910), among many others, are all science fiction novels. Wells published more than fifty novels and novellas in his eighty years' lifespan, which, as a result, made him earn the title "The Father of Science Fiction," along with Jules Verne (Roberts 48). It is because H.G. Wells is "the pivotal figure in the evolution of scientific romance into modern science fiction. His example has done as much to shape SF as any other single literary influence" (Parrinder 10). In the novel *The Island of Dr. Moreau*, for example, Wells examines the evolutionary capacity of animals, and thus represents the loose biological borderline between human and other animals. After the publication of Charles Darwin's *The Origin of Species* (1859), implications of the work had a "far-reaching effect on the development of SF in later nineteenth and early twentieth centuries" (Moore 52); thus, in this context, Wells's novel *The Island of Dr. Moreau* can be regarded as one of the most important works in relation to themes of evolutionary biology, natural selection, and adaptation theory that both Darwin and Wells ponder about in their own way.

As a nineteenth-century dystopian science fiction, *The Island of Dr. Moreau* features a mad scientist as one of the leading characters, whose ultimate goal is to forge hybrid creatures via vivisection technique applied on non-human animals. His attempt is to make them human and to see the competence of the plasticity of the body as well as to re-shape both their physical and cognitive capacities by making his creatures stand erect,

speak a human language, and all other habits that are considered humanly. To put it differently, Dr. Moreau relentlessly tries to "burn out all the animal" (Wells 85) in his animal victims, who are brought to the island from the country with a ship, and to make them human individuals. Even though the Beast Folk try hard not to disappoint their creator by pretending to have become humans, vivisected animals are neither animal nor human, but they are both. In fact, they are hybrid creatures composed of animal body and human intelligence. Hence, even though the novel swings between the posthuman potentialities with the Beast Folk and Prendick's shift of mindset at the end of the novel, thus having a confusion about what it means to be a human and an animal, the novel cannot be entirely detached from anthropocentric and speciesist attitudes, ideologies, and discourses. However, the novel also becomes the representation of posthumanist potentialities; one of them (the Beast Folk) suggests a physical incarnation that ruptures itself from the problematic nature of the term human, while the other (Prendick) does it by undergoing a mental shift and becoming an outcast among human society. Hence, both the Beast Folk and Prendick, in two very different ways, suggest humans another way of being and living in nature, which challenges the anthropocentric values that are at the core of the novel.

Yet, even though the Beast Folk, each of whom is composed of different animal parts such as, puma, hyena, swine, dog, or monkey, are given human form and are educated with human language and behaviors, they are not accepted as individuals who have autonomous consciousness or sentience. That is the reason why one should think that the treatment of the Beast Folk is speciesist. As an example, Prendick, the narrator of the story, cannot look at the Beast Folk without the feeling of abhorrence as he states "there was something in their faces —I knew not what— that gave me a queer spasm of disgust" (27). Dr. Moreau's assistant Montgomery shares this feeling, moreover, with the ease of having been on that island with them for many years, his attitudes towards them are reckless and belittling: "Confound you!" Montgomery says, "Why the devil don't you get out of the way?" and then, the animal-faced man cowers and mumbles, "They—won't have me forward," Prendick comments on its speaking, "[h]e spoke slowly, with a queer, hoarse quality in his voice" (12). Therefore, the innately human characters do not value the Beast Folk for what they are. Rather, their responses reveal a bias against other species and an exclusive focus on humans.

Anthropocentric perceptions and treatments of the human characters towards anything that is not considered as human can also be seen as a moral degradation as Sherryl Vint argues. To Vint, *The Island of Dr. Moreau* is "deeply concerned with the relationship between scientific development and moral progress, and the consequences of the former outpacing the latter. It tells the story of a mad scientist who alters animals in order to make them more human" ("Animals and Animality" 85). In other words, the more scientific breakthroughs that the human characters make in the novel, the less care and attentiveness they pay to the other species, making them speciesist and anthropocentric. Vint further claims that such amalgam of human and animal life (the Beast Folk) created a disturbance among the Victorian society as they saw such connection was implausible and preposterous ("Animals and Animality" 85). In the nineteenth century in which human beings were seen the most reasonable and noble creature, such amalgams of human and animal were perceived as an insult to human beings' uniqueness. Another yet similar analysis is done by Anne Stiles in her article titled "Literature in 'Mind': H.G. Wells and the Evolution of the Mad Scientist." In this article Stiles finds similarities between *The Island of Dr. Moreau*, and another nineteenth-century science fiction novel, *Frankenstein* (1818), both of which share the same mad scientist trope as their protagonists who end up molding a new kind of creature with consciousness:

> Moreau settles on remote Noble's Island near the Galapagos and there grafts the bodies of various kinds of animals together in order to create 'Beast People' with near-human intelligence. These monsters speak broken English and worship their creator. Like Frankenstein, Moreau is unmarried, single-mindedly devoted to research, and shamefully neglectful of his creations, one of whom (a female puma) ultimately kills him. (332)

The reason of the similarity of topics and characters between Mary Shelley's *Frankenstein* and Wells's *Dr. Moreau* can be traced back to the accelerated scientific improvements and their fictional representations both as genres and characters in the nineteenth century. As Vint and Stiles make clear, both nineteenth-century science fiction novels narrate a mad scientist, who, for the sake of scientific advancements that they hope to achieve in their own ways, also with the push of their own personal curiosity, ignore their ethical consideration towards other species. In other words, as it is observed in these novels that scientific progress and moral values do not proceed in tandem: scientific advancement does not prioritize moral and ethical concerns.

It is no coincidence that a work like *Dr. Moreau* was a product of the nineteenth century which witnessed some novel works, inventions, discoveries, and nascent ethical concerns towards animal treatments. As an example, Charles Darwin's *The Origin of Species*, a groundbreaking work about the evolution theory, claims that human also is an evolved species just like every other component of nature. This revolutionary book of Darwin aptly dethrones the human exceptionalism which was at its climax in the nineteenth century by claiming the evolutionary theory. Another essential work in the nineteenth century to contribute to the scientific development is Dmitri Mendeleev's first creation of the periodic table of elements (1869). The work is essential as it is the first to categorize the chemical elements, as well as to understand and advance the field of chemistry. In the field of biology, on the other hand, Oscar Hertwig's *Text-book of the Embryology of Man and Mammals* (1892) can be listed among many other discoveries that took place in the nineteenth century about the politics of life itself in a way to include both humans and animals. This too is an essential study regarding the deconstruction of the assumed human and animal onto-epistemological status. In addition to these studies, some acts had been passed by the government too, such as, Cruel Treatment of Cattle Act (1822), Cruelty to Animals Act (1876). People also gather around to establish London Anti-Vivisection Society to condemn and protest vivisection. One other influential work of the nineteenth century about animal advocacy is British social reformist Henry Stephens Salt's book titled *Animals' Rights: Considered in Relation to Social Progress* (1892), which aims to include animal individualism and welfare into the social and political consideration. In an era as such, revolutionist works are carried out in terms of science and the meaning to be an animal or human, and Victorian novelists take a more passionate interest in contemporary scientific works and practices in laboratories (Hornsby 36). Hence, scientific and technological developments of the nineteenth century were represented in literature with parallel features, phenomena, and concerns in their fictional worlds. These are most evident in science fiction novels as SF is a genre that gives author enough emancipation from reality to create any fictional world employing the most current scientific developments. Thus, nineteenth-century science fiction gives voice to the capacity of biological development, human and animal evolution as *Frankenstein*, in which Dr. Frankenstein, creates a novel life form via galvanism technique, and in *The Island of Dr. Moreau*, in which Dr. Moreau hybridizes animals via

vivisection well represent the genre and its interest in contemporary science. In other words, the genre of science fiction sf in this century was fueled by the scientific as well as technological developments of the time and presented fictitious but plausible possibilities in terms of bodily alterations, hybridities between humans and animals. Kelly Hurley, in *The Gothic Body* (1996), examines the literatures of fin-de-siècle, which is a French term that Hurley chooses to use to refer to the end of the century, and states that "fin-de-siècle Gothic might appear as purely reactive, emerging within late-Victorian culture as a symptom of a general malaise occasioned by the sciences" (5). As an example of a malaise as such, mad scientists and moral insanity can be given instances which were popular themes in the nineteenth century (Stiles 319–325). The mad scientists are the characters who convey the scientific quality of the novel; they often have a scientific jargon, and they are associated with "madness, bloodlust, and evil genius" (Block 445). From a different perspective, Stiles revisits the history of genius from the perspective of clinical association (319). She finds the ideological roots of the famous mad scientist trope in John Ferguson Nisbet's book *The Insanity of Genius and the General Inequality of Human Faculty, Physiologically Considered*. In this book Nisbet declares that "genius, insanity, idiocy, scrofula, rickets, gout, consumption, and the other members neuropathic family of disorders reveal disorders" uncover a "want of equilibrium in the system" (Nisbet 57). Further, Nisbet claims that genius is a "nerve disorder" which "runs in the blood (Nisbet 325). Similarly, French psychiatrist Jacques Moreau argues in *Morbid Psychology* that "genius was essentially a 'névrose'" (qtd. in Becker 29). According to Stiles, Moreau argues that geniuses arise due to instinctual behaviors not to divine inspirations and he further argues:

> Contrary to what one observes in men of average intelligence, the work of superior men is entirely spontaneous, and in some ways as involuntary as possible. It is the result of impulse and an instinctive need, and of an intellectual appetite that makes itself felt, no one knows why ... it has been said, and with reason, that no one is less free in his work, to choose the time of his work in particular, than the men of whom we speak. (qtd. in Stiles 325)

In opposition to what a man[6] with average intelligence demonstrates as a set of behaviors, as Jacques Moreau argues, a man with high intelligence, that is a genius, acts according to his own instinctual and spontaneous needs. Being an evil genius, then, the mad scientist

[6] In the discussions regarding mad scientists and geniuses, these people are presupposed to be male and are defined through phallogocentric pronouns.

Dr. Moreau is the representation of what morbid psychology discusses here about the mental state of people with high intelligence.

Wells's mad scientist Dr. Moreau matches perfectly on every level with the abovementioned assorted definitions of the mad scientist figure. He is instinctual and spontaneous with reckless behaviors for the outcomes of his experimentations. As an example, in the chapter titled "The Locked Door," Prendick has his first encounter with Dr. Moreau. However, he neither remembers Dr. Moreau's notorious reputation nor his name; nor he knows what has been going on in the island yet. He recognizes Montgomery's voice: "'Moreau!' I heard him call" (34), only after this incident Prendick starts questioning: "Where had I heard the name of Moreau before?" (34), he asks himself. He tries to recollect his memories about Dr. Moreau, and says "'The Moreau Hollows'— was it? 'The Moreau—' Ah! It sent my memory back ten years. 'The Moreau Horrors!'" (35). The grounds of the reputation, 'The Moreau Horrors' becomes clear when Prendick recalls everything he knows about him:

> Moreau was, I suppose, about fifty,— a prominent and masterful physiologist, well-known in scientific circles for his extraordinary imagination and his brutal directness in discussion … He had published some very astonishing facts in connection with the transfusion of blood, and in addition was known to be doing valuable work on morbid growths. Then suddenly his career was closed. He had to leave England … and by the help of a shocking accident (if it was an accident), his gruesome pamphlet became notorious. (35–36)

It becomes clear that the genius scientist Dr. Moreau carries out some wanton experiments back in his famous-scientist days in the country without any consideration of ethics, but only in pursuit of his own personal instincts. His obsessive and perverse dedication to his cause, and of course the brutality of it, leads to his expulsion from his role as a successful and famous scientist in the country. Approximately eleven years ago, because of his compulsory isolation from the scientific circle, he decides to carry out his vicious experiments on animals on a remote island, a place where no set of eyes can see his experiments as well as their results. Sherryl Vint also expresses a similar notion about Moreau: "Moreau was banished to his island due to vivisectionist cruelty, driven from London by the combined scandal of a sensationalist pamphlet exposing conditions in his laboratory" ("Animals and Animality" 88). For example, it is revealed in the book that "a wretched dog, flayed and otherwise mutilated, escaped from Moreau's house" (Wells 36). Together with post-dualist and post-anthropocentric perspectives, as Vint suggests, "animal studies give us further insight into Moreau as a 'mad scientist' and enable us to

see that his madness exemplifies some of the problems with Western science conceived as a discourse of taming nature" ("Animals and Animality" 86). Parallel with the era's conception of science, a legitimate tool to tame nature, Dr. Moreau uses it to tame animality. That is, he tries to burn out all the animal inside them, removing their natural untouched wildness. Using genre-specific elements, Ed Block offers an alternative classification, categorizing Dr. Moreau as a nineteenth-century gothic novel. He further notes on the novel by asserting that Wells "depicts the horrors of evil genius, duality, degradation, and insanity which are the result of moral and scientific failures in such surgical experimentation" (465). While Vint approaches the topic from animal studies perspective, Block Jr.'s approach is that the novel can be grouped under the genre of gothic fiction. Both scholars' approaches are relevant here because such features of nineteenth-century gothic fiction —or as it is referred as dystopian science fiction novel in this thesis—, become apparent in Wells's novel with his character Dr. Moreau. To combine with the abovementioned features of Dr. Moreau, it becomes perfectly apparent that Wells's genius character Dr. Moreau fits perfectly to the nineteenth-century figure of genius and evil scientist.

One of the most prominent features that makes Dr. Moreau a perfect mad scientist is the Beast Folk, a brand-new species created by his vivisection surgeries. This species, composed of the body parts of multiple animals, has human form, and speaks broken English. But how does he vivisect animals and form the Beast Folk? He explains this excruciating process by giving every little detail whilst explaining the truth to Prendick, and he elaborates on this surgical process as follows: "These creatures you have seen are animals carven and wrought into new shapes … It is not simply the outward form of an animal which I can change. The physiology, the chemical rhythm of the creature, may also be made to undergo an enduring modification" (Wells 78–79).

The vivisection process, in which the freshly cut animal fragments are sewn to another animal's body, thus, carved into new shapes, is what Dr. Moreau has been doing to animals for approximately eleven years. Yet, as Dr. Moreau explains, it is not just a surgery of physical cutting and sewing of living animal bodies. By contrast, "Moreau's goal is to be able to change minds as well as bodies" (Vint, *Animal Alterity* 190) theorizing that "in our growing science of hypnotism we find the promise of a possibility of replacing

old inherent instincts by new suggestions, grafting upon or replacing the inherited fixed ideas" (Wells 54). In other words, he also tries to lift their cognitive capacities by teaching them 'human' qualities such as speaking a language or standing erect and walking on two feet. By doing so, Dr. Moreau eventually pursues to eliminate this required excess from the calculation of his science and ushers in a rationality in which nothing will defy his enforced order and all knowledge will be evident (Christensen 577). In this regard, vivisection experiments, certainly brutal and barbaric towards animals, are just another ordinary daily chore for Dr. Moreau. In other words, he is so blinded by his desire to create his own creature with zero trace of animality that he does not even hear the painful cries of animals, and he is solely focused on his own goal. As it has been a long time since Dr. Moreau and Montgomery are on the island, they have already grown accustomed to the agonizing cries of tormented animals.

Prendick, however, is rather different than Moreau and Montgomery as he questions Dr. Moreau's aims and expresses his reproach to him: "I could have forgiven him a little even, had his motive been only hate. But he was so irresponsible, so utterly careless! His curiosity, his mad, aimless investigations, drove him on; and the Things were thrown out to live a year or so, to struggle and blunder and suffer, and at last to die painfully" (105). To recall Jacques Moreau's critical observation about geniuses in *Morbid Psychology*, as he puts, people with above average intelligence tend to act without thinking, considering, or calculating the outcomes of their actions; by contrast, their acts are instinctual and spontaneous. In line with this interpretation about geniuses, Dr. Moreau, the genius mad scientist, carries on his reckless experiments of animal bodies out of his personal curiosity and without any prior anticipation about the possible consequences. He does not even take the responsibility of his creatures; his attention-span to the animal Beast Folk is as just long as his experiments; once the experiments finish, he no longer pays attention to or cares for them, because his only aim is to take his triumph one step further, not to think the wellbeing of his creatures. In this regard, Prendick's complaint about Dr. Moreau is that he does not display an ethical and responsible attitude. As an example, during the process of the vivisection of a puma, Prendick hears "[a] sharp, hoarse cry of animal pain came from the enclosure behind [them]. Its depth and volume testified to the puma" (39), while Prendick is agitated with this; as befits to a mad scientist, he describes this excruciating practice of vivisection as an "artistic torture" (79).

Furthermore, he projects all his experiments which are driven by own personal curiosity and satisfaction as if they were divine ordainments by comparing his cruelty towards animals to nature as a kind of justification to his malevolent deeds. He indicates that "the study of Nature makes a man at last as remorseless as Nature" (82). During the process of 'the study of nature,' Dr. Moreau himself confesses that he inflicted wanton suffering and even death upon countless animals, and he

> began with a sheep, and killed it after a day and a half by a slip of the scalpel. I took another sheep, and made a thing of pain and fear and left it bound up to heal … It remembered me, and was terrified beyond imagination; and it had no more than the wits of a sheep. The more I looked at it the clumsier it seemed, until at last I put the monster out of its misery. These animals without courage, these fear-haunted, pain-driven things, without a spark of pugnacious energy to face torment, —they are no good for man-making … Then I took a gorilla I had; and upon that, working with infinite care and mastering difficulty after difficulty, I made my first man. All the week, night and day, I moulded him. With him it was chiefly the brain that needed moulding; much had to be added, much changed. (82)

With no sense of ethics, he has conducted vivisection on animals from all kinds. In the path of his personal scientific victory, he sees everything expedient. Apart from the fundamental ontological distinctions between human and animal, his viewpoint also outlines differences among animal species themselves. It is true that animals should not be reduced to singularity as if there was only one kind of animal. Jacques Derrida, in *The Animal that Therefore I am* (2008), argues that the word animal as he considers it is a "pseudo-concept" because "the use of this word in the singular, as though all animals from the earthworm to the chimpanzee constituted a homogeneous set to which '(the hu)man' would be radically opposed" (x). However, it should not also mean that animals are to be categorized hierarchically. Nor it should mean that "animals should matter because they are similar to humans, but on their own and for their own reasons" (Stanescu 00:03:02). Instead, as Derrida puts, thinking animals is "rather a matter of taking into account a multiplicity of heterogeneous structures and limits: among nonhumans, and separate from nonhumans, there is an immense multiplicity of other living things that cannot in any way be homogenized, except by means of violence and willful ignorance" (*The Animal* 48). Hence, animals should not be singularized as there are thousands of different animal species living in/on/under the Earth as Derrida aptly insists. Moreover, as Vasile Stanescu critically underlines, animals are not to be valued on the similarity degree to humans, but rather, they should be only valued for the fact that they exist in nature. In Aldo Leopold's words, they should matter for their "intrinsic beauty" and value

(174). However, Dr. Moreau does not seem to embrace the stances put forward by Derrida and Stanescu; to Dr. Moreau, the only thing that matters is whether he can accomplish his life-long dream of 'creating his own man' by erasing all animality or not. That is the reason why he sees all the animals as instruments through which he can succeed by cutting, molding, and reforming them. In the long path of shaping his own rational 'men,' the self-claimed deity Dr. Moreau not only re-shapes them physically, but he also plays with their minds into thinking that Dr. Moreau is their God. That is, he deifies himself in their minds, which are now nothing but tabula rasa. Hence, with no memory from their previous animal selves, the Beast Folk, as if reborn, have only the image of Dr. Moreau in their minds and recognize him as their god, an idol to worship. Prendick observes this situation on the Beast Folk, who are, according to Prendick, hypnotized by Dr. Moreau, and he states:

> In spite of their increased intelligence and the tendency of their animal instincts to reawaken, they had certain fixed ideas implanted by Moreau in their minds, which absolutely bounded their imaginations. They were really hypnotised; had been told that certain things were impossible, and that certain things were not to be done, and these prohibitions were woven into the texture of their minds beyond any possibility of disobedience or dispute. (88)

They have created a primitive religion that is centered on Moreau, whom they worship as a God of Mercy and Pain (Roberts 61). They chant: "His is the House of Pain. His is the Hand that makes. His is the Hand that wounds. His is the Hand that heals. His are the stars in the sky" (Wells 65). Moreau so impeccably locates himself as the God figure in the Beast Folk's minds that they now create a hymn for the sake of this divine creator. In other words, from that moment on, Dr. Moreau is this divine figure, a kind of God who can punish and heal. Adding to his mad scientist features, Dr. Moreau's role on the island, for the Beast Folk, turns into "sadism, the distorted delusion of a man who has made himself into a god" (Vint, "Animals and Animality" 87). By becoming a god in the eyes of the Beast Folk, Dr. Moreau reassures his safety among them because, based on his previous experiences, he acknowledges that if repressed animality prevails over their 'humanity,' which they try to develop, he would be killed by his own creatures.

However, the Beast Folk try to suppress their animality because they know that "[p]unishment is sharp and sure" (Wells 67) and it is as if they tried to tame their bestiality, and if they kept chanting the sentences they have developed and called 'The Law' over and over again, they would become 'human:' "Not to go on all-fours; that is

the Law. Are we not Men? Not to suck up Drink; that is the Law. Are we not Men? Not to eat Fish or Flesh; that is the Law. Are we not Men? Not to claw the Bark of Trees; that is the Law. Are we not Men? Not to chase other Men; that is the Law. Are we not Men?" (Wells 64). The Law is a kind of oath among them, that is, an oath that they took to kill their bestiality. All in all, for years, the creator/God Dr. Moreau obsessively removes the subjectivity of animals and condemns them to a painful process of vivisection to satiate his personal curiosity. Meanwhile, to ensure his own safety among these 'creatures,' he instructs them to be modern and civilized, like humans, and punishes those who do not become like one.

In this context, Dr. Moreau, the mad scientist with all his attitudes and discourse, and his positioning himself as a god, also reveal quite anthropocentric and speciesist qualities. Reminding that Dr. Moreau is a nineteenth-century character, it would not be wrong to say that such a discourse and mindset are an extension of Humanism. Humanist mindset idealizes human in an anthropocentric and speciesist manner. In this regard, Dr. Moreau highlights the strict ethical and ontological boundary between human and animal in the manner to prioritize humans over animals and promote 'human' as the norm. In other words, Dr. Moreau embodies an extension of anthropocentric notions, which promote human as the measure of everything in the nineteenth century. When scrutinized, Moreau's "sheer anthropocentric arrogance" (Moore 55) in his viewpoint, hence his discourse, becomes more apparent as his mind only works with dualities, always favoring humans over nonhumans. As an example, when Prendick asks Dr. Moreau why he chose the human form as the model, he answers: "I suppose there is something in the human form that appeals to the artistic turn more powerfully than any animal shape can" (Wells 79). This answer highlights the anthropo-normativity, which was hold tightly by Dr. Moreau as a reflection of nineteenth-century perception of human and animal. Further, he confesses that he has got "stuck to the ideal of humanity" (Wells 84). This time, humanist Dr. Moreau reveals his mindset which regards human and humanity as superior to other beings both physically and cognitively. Dr. Moreau's answer also deciphers the physical anthropo-normativity that he embraces: It is a mindset which sees all other animals from a speciesist point of view on the grounds that their appearance does not fit the standard human body. In other words, it is a stance that idealizes human body by taking it as a reference point and assigning value to every other living being in nature

according to this benchmark. In this regard, physical anthropo-normativity can be epitomized with the famous Vitruvian Man, a fifteenth-century painting by Leonardo Da Vinci. In his famous artwork, Da Vinci "works up the ideally proportioned human figure as defined by the ancient Roman architectural author —that is, a figure circumscribing a circle with its extended limbs, its center at the navel, a figure that, with its arms extended horizontally, can also be set within a square" (Rosand 36). Da Vinci idealizes the human as male, perfectly proportioned by geometrical shapes of circle and square, and he depicts a white man who seems quite healthy. Da Vinci's Vitruvian Man, therefore, can be interpreted from a posthumanist perspective as being an exclusionary exemplification of the human as it only represents an epitome of a healthy white man, leaving women, people of color, non-binary people, and non-human animals out of the circle. In this case, along with the human figure he takes as a reference point just like the Vitruvian Man figure, Dr. Moreau includes only a certain group of living beings in his circle and considers the rest as 'inferior.'

While physical anthropo-normativity highlights the ideal shape of body, which promotes human form over nonhumans, cognitive anthropo-normativity is a viewpoint that appreciates and standardizes only human logos and disrespects the cognitive capacity that other animals possess. Such a view towards nature and all other animals is a violation to all nonhuman others because it paves the way for human arrogance as well as the assumed right to utilize and exploit everything and everyone that does not possess logos, that is, everything but human beings. Dr. Moreau, again, reveals his cognitive anthropo-normativity by stating that "[t]o this day I have never troubled about the ethics of the matter" (Wells 82). He does not see ethics as a matter of question because he does not accept them as individuals. He removes the animals' subject status and turns them into 'things,' as a sort of object upon which he has all the rights to conduct any experiment he would like to do. He justifies his brutal eleven-year-long experiments which might have been impossible if they were conducted on human subjects, grounding the animals' lack of logos. Another instance involves his fatal misinterpretation of science, viewing it solely as a tool meant exclusively for the benefit of humanity. Essentially, he ends up abusing the very essence of science itself. From a posthumanist perception, science and technology should be humanity's 'companion species' in Haraway's terms, evolving and developing with humans itself. By 'companion species,' Donna Haraway refers to "a

story of co-habitation, co-evolution, and embodied cross-species sociality" and the term "might more fruitfully inform livable politics and ontologies in current life worlds" (*Companion Species* 4), bringing all species together in a nonhierarchical dimension, human and nonhuman or organic and inorganic. Hence, the term implies co-evolving with all elements of nature and culture together. However, Dr. Moreau utilizes them in the path of his own personal success and curiosity and bases his experiment on animal individuals. To Dr. Moreau, "[a] mind truly opened to what science has to teach must see that [vivisection and pain] is a little thing" (Wells 80). Neither science teaches that, nor vivisection is a petite thing as he assumes. However, it is for sure that Dr. Moreau, by using his humanist mindset, tries to justify his aimless, reckless, as well as anthropocentric experimentations conducted on animals by removing their subject status. Nonetheless, neither Dr. Moreau's vivisection experiments nor the process in which he removes their subject status and use them as any other inanimate object are unacceptable things within the framework of the nineteenth century scientific practices. By contrast, in that time, human supremacy was at its peak. In other words, anthropocentric attitude considers only humanity's welfare and ignores animals and nature in general.

Driven by the problematic human exceptionalism idea in the nineteenth century, Elaine Freedgood, in her book titled *The Ideas in Things: Fugitive Meaning in the Victorian Novel*, divulges the "Victorian Thing Culture" (139) and explains the commonly held idea of commodifying or objectifying animate and inanimate things. To Freedgood, "[t]he materialism of the nineteenth century dramatically expanded the zones of the organic, vastly multiplied the entities that could be described as alive or dead" (141). Victorian people were at the apex of anthropocentrism in terms elevating the human's position in nature and using both their environment and animals. As Jesse Oak Taylor rightfully puts, "[i]f the Anthropocene was invented in the late eighteenth century, then the Victorians were its first inhabitants" (878). Taylor's observation aptly pinpoints the profound impact of the Victorian people in shaping our perceptions about anthropocentrism and the Anthropocene. Moreover, Harriet Ritvo in *Animal Estate* (1987), overviews the animal status of this century and states that "[n]ineteenth-century English law viewed animals simply as the property of human owners, only trivially different from less mobile goods" (2). Viewing animals as properties who can be killed, utilized, or can be subjected to various experiments simply highlights the anthropocentric

values that nineteenth century England embraced. It was a general acceptance in the Victorian era that animals had been created for the use of humans. Thus, putting animals to work emphasizes the highest human agency and it is regarded as God's work (Ritvo 17–18). Based on dualities, speciesism, and human exceptionalism, human status in the nineteenth century can draw parallels with the one depicted in *The Island of Dr. Moreau* with its mad, anthropocentric, and speciesist scientist Dr. Moreau.

Hence, in the nineteenth century where anthropocentrism was at its zenith, Dr. Moreau and his vivisection experiments on animals are not so unacceptable. In other words, in an era in which animals were not seen as sensible and intelligent living beings, Dr. Moreau's expressions, classifications, and exploitation of animals might be seen normal. As Freedgood rightfully argues the perception of the nineteenth century as 'thing culture' can be impeccably exemplified with Dr. Moreau, who enlarges his experimentation zone by employing living animals and horrifyingly dissecting them. After Dr. Moreau removes the subject status of animals, he feels free to reintroduce their new identities in what way he wishes. Dr. Moreau first obfuscates the individuality and subjectivity of animals in his mind, by forcing himself to believe that the screams of animals, which show they are in pain, are not real: "Not all living flesh is painful; nor is all nerve, not even all sensory nerve. There's no tint of pain, real pain, in the sensations of the optic nerve. If you wound the optic nerve, you merely see flashes of light, —just as disease of the auditory nerve merely means a humming in our ears" (80–81). Conscious and sentient animal individuals are 'thinged' by Dr. Moreau, which accentuates the Victorian anthropocentrism that he represents. Not only does he devalue and objectify animals, but he also changes his own status on the island from that of a human to that of the creator and the god of the Beast Folk. By doing so, Dr. Moreau intensifies the superficial and precarious gap between the thinged animals and the deified himself.

It is possible to observe a similar stance of anthropocentrism in nineteenth century philosophy too. One of the most influential twentieth century philosophers, Martin Heidegger, who was born in the late nineteenth century, shares a similar point of view on the question of the status of animals with Dr. Moreau. In a similar way that Dr. Moreau confiscates the individual status of animals by disregarding their efforts to communicate with him by screaming and crying, Martin Heidegger ignores the subject position of the animal by stating that animals, paradoxically, are in the mode of "*having of world* and *not*

having of world" (268; emphasis in the original). In the *Fundamental Concepts of Metaphysics*, he claims that "the stone is without world" and "the animal is poor in world" but man is "world-forming" or "world building" (196). In "In the Shadow of Wittgenstein's Lion," Cary Wolfe, articulates that, for Heidegger, the difference of being poor of the animal and the human in relation to having a world, is not a matter of *level* but of *kind* (21–22; emphasis in the original). Further, to Heidegger, "there is no animal Dasein" (Wolfe, "In the Shadow" 56) referring to the animals' position of being poor in the world. Heidegger's vision of animals, then, "separates the Beings of humans, the Dasein, from the being of other species, who live but do not have being 'as such'" (Vint, *Animal Alterity* 18). Animals are poor in world because while they are alive and mobile, and able to respond to their surroundings, but they are unable to imagine themselves as separate from the rest of the world (Vint, *Animal Alterity* 18). All in all, the boundary that Heidegger puts between the ontologies of human and animal, is all based on human logos. It is the one thing that separates their existence. To put it in a different way, according to the ontological taxonomy that is offered by Heidegger, the animal is singular, and it denies the wide range of different animal species and kind, as well as the cognitive and sentimental capacity. A classification as such violates what posthumanism defends as it is purely anthropocentric. And in fact, he is entrapped by the term 'animal,' which Derrida calls a 'pseudo-concept.' All in all, Heidegger's stance on the order of life, which is hierarchically classified with the human beings at the top, is a misleading one as it takes human logos as the reference point. It is entirely anthropocentric to assess value of each nonhuman component of nature by putting humans at its center alone.

Dr. Moreau, as a nineteenth-century fictional representative figure of anthropocentrism, easily dismisses the individual subjectivity of animals because, just as the different ethical and moral standings of animals introduced by Heidegger's thought Dasein, he believes animals are poor in the world and therefore poor in the right to be counted as individuals in the moral community structured by humanity. Sherryl Vint discusses the subject in a similar way, and connects Dr. Moreau's simple rejection of the pain that he inflicts upon his experiment subjects with the view offered by Heidegger's Dasein:

> Moreau thus reinforces a metaphysics of subjectivity derived from the human—animal boundary, and his easy dismissal of the suffering of others is bound up with the values associated with this construction of subjectivity, the distanced relationship to the world that is characteristic of Heidegger's Dasein and of the abstract, scientific attitude which Moreau exemplifies. (*Animal Alterity* 190)

Dr. Moreau is so indifferent to the suffering he causes that he is even shocked by the fact that why those wanton experiments he has been doing for years had not been done by other scientists: "For my own part, I'm puzzled why the things I have done here have not been done before. Small efforts, of course, have been made,— amputation, tongue-cutting, excisions" (Wells 77). Human and animal ethical boundaries are strictly established in Moreau's viewpoint and to his eye animals are nothing but experimental subjects. That is, he does not reject the subject status of animals because this subjectivity of animal has never existed in his mind in the first place. As another example, Dr. Moreau states that "[t]hese creatures you have seen are animals carven and wrought into new shapes" (Wells 78). Dr. Moreau's animals are his toys with which he can, at his pleasure, detach the limb of one and sew it on to another, so as to eventually obtain his own peculiar species.

Dr. Moreau fails in the discussion of ethics by ignoring the subject status of animal and disdaining the suffering of his experimentation animals. Moreover, the fact that Dr. Moreau's perception is an ethical failure also raises other questions about his hybrid characters. The reason why the hybrid creatures evoke the feeling of uncanny is the striking bodily permeability that occurs between seemingly two different species. However, the borderline between those ostensibly unalike species becomes indistinct with a closer scrutiny. That is to say, the borderline that is set to distinguish human as a separate and superior race to animals is a never closed one; by contrast, it has got multiple entryways, as in the example of the rhizome metaphor. Just like the rhizome plant which, in a very non-hierarchical way, grows in any shape from anywhere, human and animal bodies can be affected, pervaded, and be mutually influenced in a multifaceted way as we are animals and animals are us.

Alongside the biological closeness of human and animal, it is highly possible to observe common behavioral motifs between the two species. That is to say, humans and nonhuman animals share common feelings and responses. Sarat Colling provides valuable examples of animal resistances, displayed in positions where they are forced

into. The resistance exhibited by animals in expressing their emotions and communicating with humans is apparent for those who are open to recognizing it. Colling tells the story of a cow who escaped from a slaughterhouse and swam across the river and stalled the police for hours (21). This resistance against death, then, should be a common respond given both by humans and animals. In "Animals, Agency, and Class," Jason C. Hribal further states: "Donkeys have ignored commands. Mules have dragged their hooves. Oxen have refused to work . . . each of these acts of resistance has been fully recognized by the farmer, owner, driver, supervisor, or manager as just that: acts of resistance" (103). Then, even though the human 'owner' realizes these acts of resistances demonstrated by the thinged animals, they force these animals to do what they want them to do with even harsher actions, coercion, and even physical violence. The reason of their indifference is that simple: They do not care what the animal feels or desires as human 'owners' do not consider other animals equal and worthy enough. However, neither are these animals mute, nor are the borderlines that human beings have built to distance themselves from their own animality intact. As the above quotation exemplifies the possibility of observing shared qualities between humans and animals (for instance demonstrating their emotions by resisting or communicating through body language) in other animals. The developing knowledge of animal cognition, communication capacities, and tool use, reveals the shaky nature of the strict and set boundary between the existence of human and animal (Vint, *Animal Alterity* 2). Not only the developed scientific and technological capacities help humans understand a fact as such but also to grasp this kind of perspective requires a post-anthropocentric point of view. However, just like Dr. Moreau, it is possible that those who have never thought of tearing these borderlines down do not appreciate the individual status of animals. Nonetheless, when these borders are dismantled, it becomes clear that human being is also an animal. Thus, the borderline between human and animal is never closed; on the contrary, it is always open for reciprocal change. This novel, *The Island of Dr. Moreau*, thus, exposes the reader to the fact that human and animal are biologically alike, specifically through its characters who are neither human nor animal. In other words, it arises an uncanny feeling both on the characters of the novel and readers by establishing hybridity between human and animal and proving the biological permeability of bodies.

The novel presents several examples of biological transgressions along the human-animal borderline. Those transgressions are represented through human-animal hybrid characters carved out to their new shapes by their creator Dr. Moreau. While Dr. Moreau does not believe that animals have suffering capacity, which highlights his anthropocentric and speciesist mindset, the very existence of the vivisected and humanized hybrids, the Beast Folk, proves the loose biological borderline between humans and animals. In other words, in Dr. Moreau's perspective, human and animal are two distinct terms and species. This is the very logic underlying his cruel practice of vivisection, but it also reminds readers that the biological distinction between human and animal is not as definitive as Moreau insinuates. While Dr. Moreau defends the strict ontological superiority of the human species, Prendick's reactions toward the Beast Folk are speciesist. His responses reassure the fact that biological difference between human and animal is so loose that he misjudges the animal hybrids as human beings.

Prendick too feels perplexed about where to place these hybrid creatures: Are they men or animals? He asks himself, "why should a man go on all-fours and drink with his lips?" (44) or with a more direct question like "what on earth was he, — man or beast?" (46). Because of the transgressed biological borderlines, Prendick gets confused and he is most of the times in a state of mind which tries to name and place their existence. He collects proofs for himself about the Beast Folk. As an example, he thinks that "[i]t was no animal, for it stood erect" (50). His mind is loaded with questions on humanity and animality, applying the approved human qualities on the Beast Folk and trying to see if they fit or not. At last, Prendick convinces himself to the idea that vivisection is being applied not on beasts but on human beings. He is shocked with the scene in which he peeks into Dr. Moreau's laboratory, and he thinks "it was a human being in torment!" (54). With a sudden realization of his own existence on the island among two vivisectors, he tries to find ways to escape from this monstrosity, or else, in the scenario in which Prendick stays on the island with Dr. Moreau, he will become one of his "animalised victims" (57). Whilst trying to escape by sailing with the boat, he is caught by Montgomery and Dr. Moreau. After Dr. Moreau asks the reason for this abrupt urge to escape from them, Prendick yells: "Because that is better than being tortured by you … They were men: what are they now? I at least will not be like them" (72). Only after Dr. Moreau explains the truth about the Beast Folk, Prendick starts to calm himself down and

listens to what he says. Montgomery's supportive sentences also help Prendick believe what Dr. Moreau states about the Beast Folk who are in fact vivisected animals, not humans. Prendick is confused when Dr. Moreau tries further to convince him into what he says, and he invites Prendick to his laboratory to see the thing with his own eyes, and then he utters: "You admit that the vivisected human being, as you called it, is, after all, only the puma?" (76). In response, Prendick states, "he had made me visit that horror in the inner room, to assure myself of its inhumanity" (76). The inhumanity lies in the devaluation of life, reducing a living being to merely 'only a puma.' The discourse itself highlights Dr. Moreau's anthropocentric and speciesist approach to the case of animals. Prendick's responses to the explanations of Dr. Moreau on the inhumanity of his experiment subjects are essential. Prendick, as a human being, reassures his own humanity after Dr. Moreau's explanations, and he is relieved as his life is spared. Put differently, Prendick no longer finds a motivation to leave the island because he now identifies it as a secure and safe haven: "The creatures I had seen were not men, had never been men. They were animals, humanised animals, —triumphs of vivisection" (77). Since the triumphs of vivisection are after all only humanized animals, the peace among Dr. Moreau, Montgomery, and Prendick is re-established. However, the relief that Prendick feels upon learning the true victims of Dr. Moreau's experiments is a misleading one as for the one who can brutally vivisect a living being, —whether human or animal— can do anything to any other living being, even to human beings. However, in truth, there is no such strict, self-employed distinctions between human beings and the rest of nature.

This clear-cut separation between human and animal lives is also criticized by the Italian philosopher Giorgio Agamben in his book titled *The Open* (2002). He opens the concept of the human for criticism and problematizes its very existence. Agamben claims that "[m]an exists historically only in this tension; he can be human only to the degree that he transcends and transforms the anthropophorous animal which supports him, and only because, through the action of negation, he is capable of mastering and, eventually, destroying his own animality" (12). What Agamben discusses here can be associated with Michel Foucault's claim about humanity, positing that human, and every quality and characteristic that falls under the category of being human is a creation of a recent date, and the process of becoming human is possible to the extent of distancing away from animal and animality. He further argues the division of life into relational and vegetal,

organic and inorganic, human and animal and without this close interruption it would probably not be possible to decide what is human and what is not. Agamben claims that "[t]he division of life into vegetal and relational, organic and animal, animal and human, therefore passes first of all as a mobile border within living man, and without this intimate caesura the very decision of what is human and what is not would probably not be possible" (15). He believes even the life of the divine would be imaginable if animal and human life can be intermingled perfectly, where neither man nor animal life is separate (Agamben 21). In other words, if the animal and human life could be superimposed, it would be possible for us to achieve, develop, or know greater things about the life itself. Therefore, Agamben's description of human and animal is a unifying one; like the two different pieces of a puzzle. The world that Agamben imagines is open; it is open to mutual relations and interactions of human and animal. It is about comprehending one another's consciousness and perception of the environment. Sherryl Vint comments on Agamben's explanation of life by stating that "[he] suggests that the difficulty in trying to separate anatomical or biological life (zoe) from consciousness or human life (bios) is that humans possess both; the gap between human and animal is always already internal to human existence" (*Animal Alterity* 19). This supposed division of life, that is, the division of different levels of consciousness, has a role in thinking about the animal. Dr. Moreau, however, is not successful in creating a life as Agamben suggests, that is, an open life where there is no separation. In addition to Dr. Moreau, Prendick also displays a similar stance when he changes his mind about escaping from the island when he learns about the real victims of Dr. Moreau's experiments. In that way Prendick strictly separates biological life (zoe) of animals from consciousness (bios) of human beings. That distinction that Prendick depicts is an essential component of anthropocentrism embedded in humans' minds.

Belief in the notion that animals exist in a state of deprivation, fosters a context in which moral limits concerning animals can be crossed. Moreover, denying their capacity for companionship as fellow species allow for human mastery over both their own animality and the entire animal kingdom. This separation reinforces a hierarchical order, positioning humans as superior to other animals. Dr. Moreau, in alignment with this perspective, delineates between animal life, animal suffering, in short, animalism and human life. He emerges as a representative figure of the nineteenth century

anthropocentric perception of animals, contending that not all animals experience suffering as humans do. Dr. Moreau further divides anatomical life (zoe) from human logos and consciousness (bios), employing this division to justify his unethical actions.

However, Dr. Moreau underestimates the power of zoe, that is, animality. He regards himself and humanity as an unwavering authority, believing that the House of Pain will remain as the overruling power forever. Yet, things do not go as planned because he is not successful at 'burning' the animality inside the Beast Folk. When Dr. Moreau does not come home to explain what has been wrong with the Beast Folk, Prendick gets anxious, and thinks: "I told [Montgomery] that some serious thing must have happened to Moreau by this time, or he would have returned before this, and that it behoved us to ascertain what that catastrophe was" (112). Before too long, Monkey-man appears in front of them, looking guiltily "at the hairy-grey Thing," and he declares, "[Dr. Moreau] is dead" and he adds, "they saw" (113). Trying to understand the meaning of the death of their god, the Monkey-man asks: "Is there a Law now? … Is it still to be this and that?" (113). Shocked, Prendick and Montgomery go on finding Dr. Moreau's dead body and they find "Moreau lay face downward in a trampled space in a canebrake. One hand was almost severed at the wrist and his silvery hair was dabbled in blood. His head had been battered in by the fetters of the puma … His revolver we could not find" (115). Dr. Moreau gets killed by his own creatures. Abiding by the laws they once made up, the Beast Folk, once pretending to be humans, now consumed by an irrepressible and uncontrollable urge, inflict devastation upon everything and everyone.

What immediately happens after Moreau's death is also worth analyzing. With the direct absence of a god figure to be feared, the Beast Folk start to question the meaning and position of Dr. Moreau, the law, and the House of Pain in their lives. Not wanting the Beast Folk to think and talk more about the death of their God, Prendick chooses to hold on to power after Dr. Moreau and immediately tries to establish a psychological dominance. To keep them under control, he addresses them as "Children of the Law," then he adds "[Dr. Moreau] is not dead! … He has changed his shape; he has changed his body … For a time you will not see him. He is—there … where he can watch you. You cannot see him, but he can see you. Fear the Law!" (114). Prendick tries to manipulate the Beast Folk by tricking them into believing in an abstract figure. In other words, he

tries to impose a panopticon-like fear into the Beast Folk, and he shouts out: “The Master and the House of Pain will come again. Woe be to him who breaks the Law!” (133). Now that Dr. Moreau’s physical figure is not there, Prendick’s idea is to keep them in order and take the lead before those savages kill them both. Yet, once animality is re-awakened inside them, it is too late for Prendick to try to keep them tamed, or, humanized. This rebellion turns all the balance upside down in the island. It is the first time in the history that these creatures have ever rebelled, not only against Dr. Moreau but for the first time in the history of the Beast Folk. It represents the uprising of an othered and thinged group of hybrids of human (low) intelligence and animal body. Defiance against a manipulative and evil genius God figure whose hands both punish and heal as such are particularly an essential point to mention as it shows the breakdown of the hierarchical order among all living beings. Both for the intact human characters and the Beast Folk, life on the island has become quite different from what it used to be once. The posthumanist reading of an event as such reveals the hierarchy that is thought to exist is quite fragile. The reason is, the Beast Folk, once restrained by the fear of Dr. Moreau, now disrupts the ontological hierarchy established by humans and kills Dr. Moreau, a god figure who stands for everything the Beast Folk believe to be true. In other words, besides burning all the animal inside them, with the uprising urge of animality, they destroy hierarchy and kill their God. As an outcome of the unexpected brutal murder of Dr. Moreau, the Beast Folk’s position in the island takes a dramatic shift. Once considered quirky but benign human-animals now become brutal predators.

The transformation of the Beast Folk actually starts some time before the death of Dr. Moreau. Before their rebellion, the animal urge in the Beast Folk shows itself, or in other words, “some carnivores of [Moreau’s] has remembered its old habits” (Wells 95). According to Montgomery’s observation, this urge is particularly strong at night. In other words, the animality they repress all day long is no longer under control at night. Montgomery says, “the Law, especially among the feline Beast People, became oddly weakened about nightfall; that then the animal was at its strongest; that a spirit of adventure sprang up in them at the dusk, when they would dare things they never seemed to dream about by day” (88). “They are all supposed to have a fixed idea against eating anything that runs on land” (96); however, doing things that they would not dare to do during the day means that they are going through a change, they are aware of their own

change yet do not want to reveal. Having been unable to resist their bestiality any longer, eventually, they kill Dr. Moreau. The transformation process, which starts with minor changes in their behavior, has seen its climax with the killing of Dr. Moreau. After Dr. Moreau's death, The Beast Folk gradually distance themselves from human traits, and Prendick observes them and acts accordingly since the Beast Folk is now no different from ruthless predators.

Even though no drastic change takes place suddenly, things diverge over time. After Prendick is left alone on the island with the Beast Folk, "[l]ines between 'Nature' and 'Humanity' blur constantly" (Carver 7). Prendick states that "it was about May when I first distinctly perceived a growing difference in their speech and carriage, a growing coarseness of articulation, a growing disinclination to talk. My Monkey-man's jabber multiplied in volume but grew less and less comprehensible, more and more simian" (Wells 136). Day by day, with the absence of fear and terror of Dr. Moreau, as well as the absence of the law and everything that stands for it, The Beast Folk seem to be losing their grasp on what it means to be human. Prendick is perplexed to observe the dramatic change happening to the Beast Folk, and he wonders, "can you imagine language, once clear-cut and exact, softening and guttering, losing shape and import, becoming mere limps of sound again?" (136). The acquired skill of speaking a human language is forgotten when they stop practicing it. They go on all fours, suck up to drink, chase after one another, and even eat flesh. That is, they do everything that the law forbids. Since there is no law "they were reverting, and reverting very rapidly" (136) and

> day by day, the human semblance left them; how they gave up bandagings and wrappings, abandoned at last every stitch of clothing; how the hair began to spread over the exposed libs; how their foreheads fell away and their faces projected; how the quasi-human intimacy O had permitted myself with some of them in the first month of my loneliness became a shuddering horror to recall. (137)

Clothing stands out as one of the most apparent human characteristics, distinguishing humans from other animals by their unique practice of covering their bodies. The Beast Folk's abandonment of this custom unmistakably signifies a departure from humanity. As the animality starts to rise again, this makeshift humanity deserts them. Thomas Huxley explains this backwards evolution as a 'retrogressive metamorphosis,' and claims that an organism can progress from a complicated form to a less complex, uniform mode

(Huxley 7) and Anne Stiles, in her article, connects the devolving process of the Beast Folk to Thomas Huxley's ideas of evolution, and she states:

> [It] stretches the more disturbing implications of evolutionary thought to their very limits. The Beast People, who revert to their animal state after Moreau's death, embody the frightening possibility of human 'retrogressive metamorphosis' described by Huxley, who warned that organisms could progress from a condition of relative complexity to one of relative uniformity. (332)

This process of devolution stops when there is nothing left about humanity in their bodies and minds. Dr. Moreau's life-long dream of creating his own beings and job of vivisecting animals to shape a new man with intelligence proves to be unreasonable with the backwards evolution of the Beast Folk. And Prendick, every day now, wakes up to a day to be "fraught with increasing danger from the Beast People" (139). They devolve because "the 'animalistic' side is still there; it's buried, in Freud's terms 'repressed' … but it hasn't *gone*" (Carver 6; emphasis in the original). It means a necessary change for Prendick too, as he must be more alert all the time for the predators that can catch him off guard and kill him at any moment. Thus, the repressed animality supersedes humanity in the Beast Folk and this situation forces Prendick to adapt himself into this new jungle as well. Based on Darwin's evolution theory, the devolution of Prendick hypothesizes that true and inherent nature would eventually defeat humans' efforts and the human-animal hybrids would revert back to their original animal nature, despite the attempts to shift their animality into humanity, raising their ontology on the hierarchical evolutionary ladder, or serving the anthropocentric ideology (Yampell 220). Yet, with the unexpected devolution of the Beast Folk, Prendick highlights the thin and intertwined ontologies of human and animal as the novel both depicts animals who have been humanized as well as a human being who is animalized. Hence, these mutual ontological transgressions along human and animal boundaries demonstrate how superficial the supposed divergence between these two species is.

Without having the control mechanism which makes the Beast Folk stay human, their repressed animality reasserts itself again and that is why Prendick is more vulnerable without the company of other human beings. Thus, the isolation of Prendick with the Beast Folk points to the beginning of a new era on the island, where the control mechanism —that is, the god figure Dr. Moreau—, the Law, the House of Pain are dead. Now, the island is not any different from wild nature for him as the Beast Folk devolves

back to their animal nature. But Prendick, in a last-ditch hope to find the horror left by the law, tries to perpetuate Dr. Moreau's horror by being strict and merciless with the transformed animals, and he states:

> I faced these people, facing my fate in them, single handed now,— literally single-handed, for I had a broken arm. In my pocket was a revolver with two empty chambers. Among the chips scattered about the beach lay the two axes that had been used to chop up the boats. The tide was creeping in behind me. There was nothing for it but courage. I looked squarely into the faces of the advancing monsters. They avoided my eyes, and their quivering nostrils investigated the bodies that lay beyond me on the beach. I took half-a-dozen steps, picked up the blood-stained whip that lay beneath the body of the Wolf man, and cracked it. They stopped and stared at me. 'Salute!' said I. 'Bow down!.' (125)

It is apparent that Prendick continues to use the same discourse as Dr. Moreau once did and he does not choose a different way to build his relationship with the Best Folk. It shows that anthropocentric and speciesist attitudes of Dr. Moreau still dominate the core of the relationship between human and others. However, his pursuit to hold onto power does not last long as he also needs to adapt himself into the new habitat that is now only dwelled by animals. After surviving alone in nature with the transformed animals, Prendick notices some alterations about himself too. For instance, he observes "a momentary recrudescence of speech perhaps, an unexpected dexterity of the fore-feet, a pitiful attempt to walk erect," and states: "I too must have undergone strange changes. My clothes hung about me as yellow rags, through whose rents showed the tanned skin. My hair grew long, and became matted together" (138). What Prendick is undergoing is a return to nature. Being far away from civilization, Prendick is alone in/with nature itself. The constructed humanity, little by little, fades out in Prendick's body, existence, and mind. He thinks, "in this way [he] became one among the Beast People in the Island of Doctor Moreau" (131). Having spent approximately ten months with the Beast Folk, each day, he looks and behaves more and more like the "half-humanised brutes" (134). However, Prendick does not give up on his dream of escaping from that island for one second. Day by day, complaining about being an unhandy man at the same time, he builds himself a boat and he drives out to sea until the "island grew smaller and smaller" (143). His wish is to escape from the island, still, he does not feel happy or relieved to see mankind again. He admits: "It is strange, but I felt no desire to return to mankind" (143). It is because "Prendick realizes that he and the Beast Men share more similarities than he cares to admit. He ridicules their primitiveness, but drilled in their laws" (Moore 54). It may be hard to believe, but Prendick's story, in which transgressions along the human

and animal borderline are crossed, highlights the fact that human animal boundary is never secure. Prendick states:

> And on the third day I was picked up by a brig from Apia to San Francisco. Neither the captain nor the mate would believe my story, judging that solitude danger had made me mad; and fearing their opinion might be that of others, I refrained from telling my adventure further, and professed to recall nothing that had happened to me between the loss of the 'Lady Vain' and the time when I was picked up again,— the space of a year. (143–144)

After a year of this queer journey, when he returns to his country, to civilization, and to modernity, Prendick thinks: "I was almost as queer to men as I had been to the Beast People" (144). He hates being among people, and he is now in an unsettled and a disturbed state of mind. In his mind, he starts to compare men and women with the Beast Folk. In other words, he feels defamiliarized with his own society, and expresses his feelings as follows: "[E]xpressionless faces of people in trains and omnibuses; they seemed no more my fellow creatures than dead bodies would be, so that I did not dare to travel unless I was assured of being alone" (145). Further, "he is filled with uncertainty concerning the humans he meets are not also the Beast People ready to revert to an animal state" (Karpouzou 94). The novel, therefore, constantly blurs the assumed boundaries between human and animal by depicting a humanized race of the Beast Folk as well as the transformed Prendick, who goes through a shift in his mindset.

Prendick does not belong to the island among the Beast Folk, but now, it seems that he also has problems being in the city, among his own people too. It is because Prendick's devolution "uses the close connection between humans and animals to satirise humanity" (Vint, *Animal Alterity* 190). It also points to the fact that human is nothing but an animal which cannot be subtracted out of humanity. In other words, Prendick re-discovers his own repressed animality by surviving on the island alone with the devolved Beast Folk, and his re-discovering his animality eliminates the anthropocentric attitude towards animals and human exceptionalism. Hence, it would not be false to say that he is now a man with no place, but both at the same time. More importantly, he is now a humanimal, or a posthuman. He does not go through a bodily change, yet his psyche is shifted and now he is a man with no animal and human boundaries.

Prendick's mind shift bears parallels with Francesco Ferrando's definition of post-anthropocentrism. Ferrando describes post-anthropocentrism as a state of mind where each boundary and hierarchy are removed. In other words, for Ferrando, rather than a

bodily change, being posthuman marks a change in the mindset. Post-anthropocentrism, one of the necessities of being posthuman, then, breaks the ontological boundaries and hierarchies between human and animal. Hence, according to the posthumanist perception of the posthuman, where there is no human exceptionalism or superiority, Prendick becomes a posthuman. In other words, Prendick reveals the fact that he goes through a shift in mind, making him a posthuman with no supposed hierarchies. Of course, in the nineteenth century, the time in which the novel was written, the term humanimality or posthuman had not yet been coined, nor the comprehension of the idea that the terms represent. It was a century in which most innovations were first attempted. Nonetheless, when analyzed from a twenty-first century point of view, posthumanism theory along with the developments in biology and deconstructive thinking allows this chapter to argue that human is an animal in disguise, modified by humanity's own constructions. In other words, the human and everything that falls under the category displays the fact that "human is an invention of a recent date" (Foucault 422). The human is more than a transcendental term without any ideology, it is a cultural and historical construct (Karpouzou 81) who, in truth, is an animal in disguise. Human beings have shaped themselves with their cultural and historical values, norms, definitions, or any other social and political regulations, yet, without any of those culturally constructed human values, human is nothing but an animal.

The fact that human is a construction can also be epitomized with the dream of Dr. Moreau: his lifelong dream is to mold different animal parts together to re-shape them in the form of human. That is, human beings have become so detached from nature and so anthropocentric that not only are they forming themselves, their environment, and the world, but as seen in Dr. Moreau's dream, they are also trying to reconstruct animals in human form. For him, the measure of everything is human, that is the reason why he gives an anthropomorphic presentation to his new creatures. However, the most fundamental flaw in Dr. Moreau's thinking is his misconception about the distinction between humans and animals, and everything he believes separates the two. It is because he could not burn out all the animal inside the beast, and the opposite of what he tries to do happens: While he is trying to humanize the animals, a human being himself is animalized. The animality prevails humanity, even in Prendick's case. It highlights that human is an invented societal identity. Once the social environment is taken out, Prendick appears to have

developed animal-like movements and habits, such as sudden reflexes like a cat's swift glance.

Nevertheless, through a posthumanist lens, this chapter contends that animality remains inherent within humans, highlighting the notion that humans are animals and questioning the constructed artificial boundaries separating them from other species. Further, it epitomizes that the future suggests regression as seen in Prendick's incarnation of the human and animal, the civilized and the savage. Wells provides us with various ways of being with a single character —one that neither the nineteenth century nor the twenty-first century have yet accepted (Farris 154). The death of Dr. Moreau is a turning point in Prendick's psyche, it makes him go through a phase in which he embodies both the human and animal standpoints, making him a human-animal. Further, not only was this idea not accepted in the nineteenth century, but it is also still not recognized in the twenty-first century. Yet the transgressions along the human animal border analyzed in *The Island of Dr. Moreau*, as well as on the protagonist Prendick, show that the foundational boundary is so thin and uncertain that each one of them can be switched on and off with ease.

In summary, Wells's science fiction novel, *The Island of Dr. Moreau* delves into themes of boundary-crossing between human and animal, presenting a narrative which is rich in dystopian elements. The figure of the mad scientist, driven by a desire to create a new species through vivisection, embodies an anthropocentric mindset, seeking to erase the animalistic traits within his creations. Despite the posthumanist alternatives explored by characters like the Beast Folk and Prendick, Dr. Moreau remains focused on his own god-like aspirations, ultimately revealing the limitations of anthropocentric perspectives. Ironically, the outcomes of his experiments and Prendick's transformation highlight the fluidity of identity, blurring the lines between human and animal. In essence, the novel underscores the socially constructed nature of humanity, emphasizing the complex interplay between biological and societal factors in defining what it means to be human.

CHAPTER II

The Animalized Humans in *Dr. Franklin's Island*

> We were pretending we were … his willing guinea pigs. He was pretending that he thought we were human, because that was the way to get the best behavior of us. But in his mind, we were animals. So it didn't matter what he did to us.
>
> —Ann Halam, *Dr. Franklin's Island*

Dr. Franklin's Island, written by Ann Halam in 2001, is an example of young adult science fiction, and its story explores gene engineering, transgenic experiments, and trans-species living beings through the imaginative capacity of a mad scientist, Dr. Franklin. The novel begins with three teenagers: Miranda, Semirah, and Arnie, who are on their way to Ecuador's Amazon rainforest and the Galapagos Islands since they are the "prizewinners in a competition run by the *Planet Savers* TV program" (Halam 1). The narrator of the novel, Semirah wins "a place on this trip by thinking up a biodiversity experiment about beetles" (Halam 1). The name of the TV program (Planet Savers) and the issue of biodiversity given in the very beginning of the novel voice the ecological catastrophes that the twenty-first century has been facing in the new age called the Anthropocene. However, before the prize winner students could arrive the Galapagos Islands and study on this biodiversity experiment, their plane crashes into the ocean, and the details of why and how it happens are not specified in the novel. Semi keeps a diary-like account of the events and narrates them for the reader; therefore, the reader acknowledges the events from Semi's perspective. According to Semi, only Miranda, Arnie, and herself manage to swim to a nearby island, but it is a big mishap for them to see all the dead bodies washed ashore and realize that they are the only three survivors of the crash. The three friends, then, by brainstorming about what to do next and helping each other out, cope to find ways to survive on the island. Then, Arnie suddenly disappears on the day eleven. After searching for him feverishly for three days, Semi admits, "we gave up searching and waiting for him, and set out on the trek to the next

bay" (47). The girls explore the island after Arnie's disappearance to find any remains of Arnie, or an escape route, or maybe other people that can help them escape. Conversely, they are knocked unconscious and they find themselves in a laboratory, where they meet Dr. Franklin and learn about his unethical transgenic experimentations. Dr. Franklin asks the girls: "[D]o either of you know what *transgenic* means?" (Halam 67; emphasis in the original), and Semi explains:

> It's genetic engineering," I said. "If you insert different genes, or parts of genes, into the chromosomes in a cell, and you can get the cell to accept them and make them work, then the plant or animal or whatever you develop differently. It will be a transgenic organism. Like, you can make crops that are resistant to weed killer, so you can spray the whole field and only the weeds will die. We've done a bit about that, in school. (Halam 67)

Transgenic plants are, as explained by Semi, modified to become more resistant to the chemicals used in agriculture. In a way, human intervention (the chemicals used in the soil) is compensated for by another one (transgenic plants). Satisfied with the girls' intelligence and Semi's answer, Dr. Franklin starts to explain the aim of his experiments: "I, with the assistance of Dr. Skinner, am on the brink of producing transgenic human beings" (Halam 68), and for this ideal he admits that he has operated on countless animals.

This chapter, therefore, analyzes *Dr. Franklin's Island* with a focus on the scientific practices of its protagonist, that is, Dr. Franklin, the mad scientist of this novel, who uses human beings as experimental subjects by deconstructing the perception of human inviolability. It aims to reveal that Dr. Franklin repudiates human exceptionalism and accepts that animality and animal skills supersede humanity's socially and historically constructed supremacy. From this perspective, this mad scientist might seem to be embracing a post-anthropocentric ideology as he enables more comprehensive and accurate viewpoints about animals and animality, as well as re-positioning of the human within this scope. However, Dr. Franklin's seeming espousal of post-anthropocentric values is actually deceiving. That is, just because he seems to be acknowledging the value of animals and animality does not necessarily mean that he truly embraces a post-dualistic and post-anthropocentric way of perceiving human and animal. To appreciate Dr. Franklin as a scientist who truly embraces post-anthropocentric values, one needs him to include animals into the moral and ethical consideration. Dr. Franklin, on the contrary, leaves the animals out of the ethical and social scope in his experiments, and he also excludes humans as well. That is, he ascribes an equal devaluation to both animal and

human lives and bodies. Yet again, because his ultimate goal, which is to create super-transgenic-humans and establish a new kind of tourism with it, serves the interests of humanity, he promotes anthropo-normativity, and he still carries the remnants of anthropocentric thinking. Henceforth, in this novel, the anthropocentric discourse and relationships are not easily observed as they are deconstructed, but this chapter shows that it might be possible through a detailed posthumanist scrutiny. Even though Dr. Franklin does not meet the ideological requirements of the terms post-anthropocentrism and post-dualism, the novel *Dr. Franklin's Island* portrays a purposive shift through a different type of the mad scientist stereotype, that is, a mad scientist who seems to be embracing animal and animality over humanity. This mad scientist ultimately aims to create 'super-humans' by making his human guinea pigs re-discover their animality. Thus, the anthropo-normativity takes a different turn in Halam's *Dr. Franklin's Island* and employs exploitative —of both humans and nonhuman animals— agendas instead.

This deliberate shift in the representation of a mad scientist stereotype has become realistic and viable with the latest developments in biotechnology, as well as with the groundbreaking studies in the fields of zoology, animal behavior, and animal psychology in the twenty-first century. The novel, therefore, foregrounds the use of scientific and technological enhancements to create a brand-new hybrid species, embodying the organic elements of human-animal as well as mechanical elements of technology in the twenty-first century. It is thus possible to observe the influence of animal studies, which began in the twentieth century, and have been truly revolutionary in recent history, in literature and more specifically in the sf genre. All studies on technology, biotechnology, animal psychology, and cognitive intelligence, which reciprocally influence each other's development, have led to a change in the way humans view themselves, animals, and animality. In other words, humans have realized that they are not alone at the apex of the evolutionary process in which they have positioned themselves, and that temporal and spatial change is fluid and dynamic. Over the last century, the knowledge of biology and genetics has advanced significantly. It is because in the late twentieth and the twenty-first centuries the rapid progressions in technology have massively facilitated scientific and biological studies and leading the way for some groundbreaking research particularly in the fields of physiology, biology, and psychology of the human and the animal. As an example, Human Genome Project which was "launched in October 1990 and completed

in April 2003, [its] signature accomplishment —generating the first sequence of the human genome— provided fundamental information about the human blueprint, which has since accelerated the study of human biology and improved the practice of medicine" (National Human Genome Research Institute). The Human Genome Project, then, is the first in history to map and sequence the whole human genome. It is essential not only because it brings the scientists together "from many different disciplines, biology, physics, chemistry, engineering" ("Lessons from the HGP" 00:00:35), but the project also "has fundamentally changed the way we do science. It brought the notion of team science and collaboration to biology" (00:00:13). Bringing a great number of scientists from different fields together, as well as being the first project to map all human genome; therefore, HGP is a harbinger of innovative work to be carried out in this field. As another very relevant example, CRISPR-Cas9 Gene Editing technique, which is used in genetic engineering in the early 2010s, is quite essential. First, in their article "Advances in therapeutic CRISPR/Cas9 genome editing" Nataša Savić and Gerald Schwank explain the CRISPRs-Cas9 Gene Editing technique as follows:

> Injection of CRISPR/ Cas9 components (Cas9 messenger RNA or protein; sgRNA; HDR template) into the zygote or early stage embryo allows modifying the genome in all cells of the organism, including the germline. Thus, this approach results in permanent changes that can be passed on to subsequent generations, offering the possibility to eliminate a genetic disease from an entire family. (16)

This development in biology, just like in Schwank's explanation above, allows the genome and germline to be altered by injecting a large protein ("Cas9") into a cell, causing a permanent change in the cell. This step is as dangerous as it is important because it gives scientists —humans— the right to carry out trial-and-error experiments on living beings. Moreover, this technique permits scientists to make permanent changes not only of the human DNA but also of animal cells. A revolutionary technique in biology as such, therefore, grants humanity with the knowledge and power to alter both human and animal biology. To put it another way, "before, scientists were limited by their experiences and their resources… Now they'll only be limited by their imagination" (Grimm 1866). As much as these developments are the reason for understanding the loose and close relationship between human and animal biology, they also point to a less imaginable future in terms of genetically modified organisms, the product of human progress.

The successful accomplishment of the Human Genome Project has enabled further studies related to gene engineering. Xenotransplantation, for example, is one of the most crucial studies in biotechnology along with the Cas9 as it is the novel way of exploiting animal bodies by leveraging the biological similarity of animals to humans. Thus, with xenotransplantation, it has become possible to grow human organs in the animal body by injecting human genes into them. In other words, this technique uses animals that are close to human DNA as a furnace to transplant organs into humans when necessary. Xenotransplantation studies "marked a singular milestone last year with the first human transplants of kidneys and a heart from genetically engineered pigs" (Aschheim and DeFrancesco 452). It is, therefore, the twenty-first century biology and technology's way of transgressing human and animal boundary and proving the kinship between human and animal biology. This simultaneously raises ethical questions since the primary aim of xenotransplantation is, by utilizing organs from animals—especially pigs because they have physiological parallels to humans— to alleviate the lack of organs accessible to human transplantation. However, scientists tend to see the advantages of this process without questioning the suffering it causes to animal bodies. It is because, even these recent studies and experimentations —including xenotransplantation— radically point to the close kinship of humans to animals, humans' wish is to continue exploiting animal bodies for their own sake. In other words, "biomedical scientific discourse often proclaims benefits rather than catastrophe, and nonhuman animals are time and again used by humans in this story of human health progression, which neglects sincere moral considerations for the nonhuman animals themselves" (Peggs 42). Hence, there are ethical concerns regarding the animal welfare, the uncanny potential of generating non-human animals with human-like traits, as well as the outcomes of blurring and transgressing the borderlines between human and animal bodies. In other words, while these xenotransplantation experiments aptly prove the loose biological boundaries between human and animal, they have exacerbated the already exploitative human-animal interactions.

With developments such as xenotransplantation and other methods developed in the recent history, human's anthropocentric interaction with animals has aggravated with further disregard for ethics. The genomic science of the late twentieth and the twenty-first centuries has thus paved the way for an increase in the number of transgenic animals

utilized for biomedical purposes (Peggs 43). Transgenics, which involves the process of inserting foreign DNA or genes in an organism's genome to modify a transgenic organism, was introduced with its first modified organism in 1974. In their article titled "Genome Construction Between Bacterial Species In Vitro," Annie Chang and Stanley Cohen explain how these have become possible. According to Chang and Cohen, most of the transgenic transaction was performed with microinjection of DNA to cells (1030). Since the introduction of the first transgenic experiment in the late twentieth century, there has been an increase both in the number of animals used in the experimentations and also in the number of the fields in which these experiments are carried out, and "in 2010 in the United Kingdom alone, just over 3.7 million new procedures on nonhuman animals were started" (Peggs 43). Thus, while the biological and technological capacities are advancing, they enable humans to understand that the borderline between human and animal is not strict and set as they would think once, and that humans and animals are biologically similar to each other. In fact, human is animal. However, this radical perceptive change does not entail a parallel change in the practical realm, or any revision in its applications in life as "we hold the contradictory beliefs that animals are sufficiently like humans to provide useful biological matter, yet sufficiently unlike us that their slaughter in these pursuits is not an ethical issue" (Vint, "The Animals" 178). It means that it is man who has distanced himself from his own animality and disregarded non-human animals at first, but with the technological possibilities of the twenty-first century, it is man himself again who remembers that he is also an animal and attributes importance to animality. Yet quite ironically, it is again man who continues to utilize other animals to elevate his own well-being. In other words, instead of channeling this awareness towards the welfare of all living beings, humans have always exploited animals for various anthropocentric reasons and in countless anthropogenic ways.

Recent studies and developments that have been carried out in biology in the twentieth and twenty-first centuries find voice in literature and philosophical discussions, too. Donna Haraway's influential book *Modest_Witness@Second_Millennium.*, for example, examines the role of women and animals in science, stressing the role of modest witness as an observer and recorder of scientific processes and knowledge. Haraway reveals sexualized, gendered, and speciesist imageries, language, and metaphors that have shaped and influenced the way knowledge is constructed in science. Haraway also

problematizes the ways technoscience produces knowledge by utilizing and exploiting nature as well as humans themselves. She claims, "[t]echnoscience extravagantly exceeds the distinction between science and technology as well as those between nature and society, subjects and objects, and the natural and the artifactual that structured the imaginary time called modernity" (*Modest_Witness* 3). She also scrutinizes and critiques the genetically modified animals produced in laboratories, and as Miller and Varney well puts, "[Haraway] prompts us to contemplate what we share with the cloned and transgenic inhabitants of the world; she urges us to understand ourselves as not only producers of technoscience but also products of it, and she moves us to see the world as technoscience's most ambitious might and to ponder the political implications of their point of view" (413). OncoMouse, for example, "is a patented transgenic mouse that carries a human gene that causes it to develop breast cancer" (Miller and Varney 413). With the aim of finding a cure to cancer, scientists alter a non-human animal's genetics, undermining and disregarding the intrinsic value of the animal, scientific studies commodify and utilize non-human bodies. Similarly, Carol Adams, who is an American writer, feminist, and animal rights advocate, rightfully puts, "scientists can be irresponsible toward animal rights because they are focused on a 'higher' right, the rights of humans to survive" (*Neither* 46). Applying well to the fictional representations of mad scientist tropes exemplified in the novels that are subject to this thesis, Haraway and Adams touch upon how scientific world can be indifferent toward the animal subject who has been exploited, as explicitly seen in the case of the transgenic OncoMouse. Nonhuman world, then, is victimized as humans are focused on a *higher* purpose.

Broadening the spectrum of living beings who are put in pain, Haraway claims that not only animals, but also other members of the world is open to danger and exploitation in any possible *higher* right for human beings. Thus, Haraway, problematizes the misuse of living beings in a more comprehensive manner:

> The objections include increasing capital concentration and the monopolization of the means of life, reproduction, and labor; appropriation of the commons of biological heritance as the private preserve of corporations … intensified cruelty to and domination over animals; depletion of biodiversity; and the undermining of established practices of human and nonhuman life, culture, and production without engaging those most affected in democratic decision-making. (*Modest_Witness* 60–61)

Haraway highlights the fact that the methods that technoscientific studies use are all anthropocentric, and more radically, she claims that these practices intensify and

radicalize the abuse of all non-human world. By doing so, she strongly emphasizes and points to the pernicious sides of this highly advanced technosciences. Putting her argument in a more radical way, she asks a rhetorical question: "Who lives and dies —human, nonhuman, and cyborg— and how, because OncoMouse exists?" (*Modest_Witness* 113). Countless of animal lives have been squandered so far in human beings' long-lasting path of creating transgenic living creatures. By contrast, however, Haraway's suggestion is to rebuild the world in a technoscientific and a democratic way which also includes people as well as all the non-human things and beings (animal and nature) (Miller and Varney 414) instead of using other animals irresponsibly in the process of biological and technological developments for humans' sake.

Haraway's analysis of OncoMouse example can also find a similar depiction in the novel *Dr. Franklin's Island*. Rephrasing Haraway's question, one might ask: "Who —which animals— lived and died because transgenic Semi and Miranda exist?" The answer is, as Dr. Franklin and Skinner repeatedly admit in the novel, countless animals. Using advanced technological and biological capacities in transgenic experiments on both animals and humans, Dr. Franklin combines animal and human DNA and creates a superhuman with animal shape and animal abilities, updated with human logos. In this regard, Dr. Franklin is a shifted representation of the mad scientist figure, who victimize countless nonhuman animals and now he is ready to victimize human beings. In line with the recent developments in biological awareness, he is now aware of the fact that human and animal are not two distinct species and human is not biologically exceptional. Besides, disregarding the intrinsic value of all living beings, Dr. Franklin becomes a great exemplification of Haraway's argument.

Dr. Franklin's attitudes suggest to readers that he acknowledges animals possess superior physical capacities and skills for adapting to natural environments, thus enhancing their chances of survival. However, he does not embrace a parallel change in his ideology, which encompasses the welfare of both animals and humans. Even though Dr. Franklin's story is an example of science fiction that explores the fluid boundaries between human and animal that are already transgressed through transgenic experiments, his relationship with animals in the story remains anthropocentric as he still promotes anthropo-normativity —though in an altered and deconstructed way— and ascribes

devaluation to any life in his way of victory. Hence, just like twenty-first century biotechnologies examples, his radical awareness on humanity and animality does not display a corresponding change in his mindset. To put it another way, although twentieth and twenty-first centuries' biological studies have revealed that human is not superior to non-human animals; hence, they should not be considered as exceptional. This might be observed in human beings' fictional representation in literature as well as in the practical realm since the core of human-animal relationship has not changed; it was, is, and will be predominantly anthropocentric. Moreover, Sherryl Vint, in a similar manner, problematizes humans' ideology about non-human animals and nature, underlining the accelerated human-animal questions and interests in SF genre. In her article titled "The Animals in That Country," Vint states that "in the late twentieth century, sf enthusiastically took up the question of cyborg identity in relation to machines; now in the twenty-first, we are ready to explore sf's contributions to our kinship with animal" (178). Even though twenty-first century science fiction novels now in fact explore the themes in which the ontological lines between human, animal, and machine are disrupted and the idea of human exceptionalism is deserted, anthropocentric and self-centered relationship of humans with the *other* is still pertinent, as it is depicted in the novel.

Being a twenty-first century sf novel, *Dr. Franklin's Island* explores the potential outcomes of the transgressions of the physical and cognitive borderlines between human and animal in an attempt to forge new, hybrid life forms of living trans-species, while at the same time exemplifying the loss of autonomy, subjecthood, that is, the otherization in pursuit of a *higher* dream. The teenagers, Semi, Miranda, and Arnie, who are imprisoned after the plane crash, are otherized by Dr. Franklin. He chooses them as subjects of his experiment since they are stranded on the island and have nowhere else to escape. The island, the setting of the novel, then facilitates Dr. Franklin's goals as he can easily capture and utilize these teenagers for his research, and he states, "you are ideal. You are missing, believed dead. You don't exist" (Halam 74). Thus, Dr. Franklin sees no reason why these young people, who have disappeared and are assumed to be dead, should not be subjected to a loss of subjectivity again and experiment on them. In other words, they are the perfect subjects to his experiments; three teenagers who are lost and believed to be dead already. It means that even if his experiment results in failure and the teenagers die, there is no one to hold him to account. Semi states that Dr. Skinner —the apprentice

of Dr. Franklin— "showed [them] [their] cages and locked the doors … stood looking at [them] with horror and pity. Exactly the way [they]'d looked at the weird animals in Dr. Franklin's Zoo" (72) because "for Franklin, both human-animal and animal lives are meaningless as compared to his success, fame, and fortune" (Yampell 210). In this context, both the subjecthood of non-human animals and human beings are similarly othered and exploited in the process of Dr. Franklin's goal. In other words, Dr. Franklin objectifies and otherizes them for the development of his research. Hence, Dr. Franklin puts these people into the status of exploited animals, that is, he animalizes humans both physically and ontologically. As Cat Yampell puts, through Dr. Franklin, Ann Halam "reflect[s] and subvert dominant anthropocentric ideologies, and rupture[s] delineations that maintain the separation of human-animals from animals" (208), since Dr. Franklin's scientific values do not represent a traditional anthropo-normativity and anthropocentrism; on the contrary, his ideas are the representation of a radical shift in anthropocentrism: He is a scientist who is well aware of the fact that animals do have superior physical skills in terms of survival, yet, he does not think of including animals into the moral and ethical consideration. Quite drastically, he excludes *some* humans from his consideration too. He accepts animality, yet everything is —both animal and human— expandable raw materials in his scientific research. Dr. Skinner admits: "We've had plenty of losses. And some survive in very twisted forms. But our goal is to take humanity beyond all the limits. Of course there's a price to pay" (Halam 72). This time, both animal and human lives and bodies are the price because as Haraway posits, "the suffering caused to the research organisms [is] balanced by the relief of human suffering" (*Modest_Witness* 113). Both for Dr. Franklin and his assistant Dr. Skinner, any loss can be afforded and also justified in the ever-lasting pursuit of becoming and creating 'more.' In other words, Dr. Franklin is ready to victimize as many more animals and exploit as many human beings as necessary.

The radical shift in anthropocentrism represented by Dr. Franklin can be further exemplified with his secretive genuine aim, which is revealed by Arnie later on. Dr. Franklin's greater aim is to develop this transgenic formula by trying it on a larger number of people, and Arnie explains further:

> I reckon if they iron out the problems, they'll be selling their formula to an exotic holiday company… They talk in front of me, you see… Imagine it. You take a pill, or a couple of injections. Like being vaccinated. They put you in a flotation tank overnight, while the ugly stuff is going on. You wake up in a five-star underwater hotel, on your ocean safari. Or in some kind of luxury cliffside flying lodge, on the wall of the Grand Canyon. Spend two weeks exploring the deep ocean, or flying like a bird, then go through the same thing in reverse. The way it works now is no good. (Halam 171)

Dr. Franklin has a commercial plan to use this formula as a touristic experience if he can develop his transgenic experiments. This also brings out a new way of capitalism, using transgene experiments as a means of tourism. An aim as such means the opposite of what post-anthropocentrism offers. In other words, Dr. Franklin's capitalist ideals contradict with the posthumanist (post-anthropocentric and post-dualist) stances. On the contrary, humanity's ambition to become/create *more* has reached a level that even human bodies are equally disposable. Hence, while Dr. Franklin is the representation of the change in perception on human and animal ontology, he also stands for the anthropocentric qualities of human mind, advanced and radicalized by the possibilities of the twenty-first century.

Dr. Franklin's anthropocentrism is radically marked by his speciesism as well since Semi and Miranda are not in the status of human, but they are quasi-human now. It is because they are outside of their social and political circles; they are believed dead. In other words, Dr. Franklin sees Semi, Miranda, and Arnie as commodified animals, just like other nonhuman animals in his zoo. Semi declares: "We were pretending we were … his willing guinea pigs. He was pretending that he thought we were human, because that was the way to get the best behavior of us. But in his mind, we were animals. So it didn't matter what he did to us" (Halam 108). This behavior of Dr. Franklin "… indicate[s] a complete disregard for life —any life— whether animal or human-animal, and his lack of hesitation not only to experiment on human-animals but also to sacrifice them at the end of the experiment complicates an interpretation of Franklin as solely speciesist and anthropocentric" (Yampell 210). When Semi and Miranda, for example, try to escape before the experimentation process starts, they get caught by Dr. Franklin. He, according to Semi, does not seem he is angry with them. Semi explains: "Dr. Franklin was smiling. He wasn't angry with us for trying to escape. We couldn't make him angry. We were experimental subjects" (Halam 89). He would not be angry if he saw one of his experiment nonhuman animals trying to escape as well. It is because he does not attribute individualism, autonomous capability of desire, or in general, subjectivism to nonhuman

animals. Now, he removes the subjecthood of Semi and Miranda as well because only this way he can be superior to them as "subject status equals supremacy over another" (Kappeler 154). Hence, even though Dr. Franklin seems to be rupturing the anthropocentric and speciesist mindset, a posthumanist —along with the post-anthropocentric and post-dualistic— reading of the text reveals that he still holds onto the remnants of the traditional anthropocentric ideals with a radical perception shift on animality.

By attributing equal levels of othering and devaluation to any life form, Dr. Franklin places non-human animals and humans in the same ontological order, which raises further inquiries in terms of comparing human and animal ontologies. Humanist traditions use the term *humanitas* —humanity in English— to refer to both ontological and ethical concepts. The terms *paideia* and *humanitas* have been linked to a categorical dualist ontology, suggesting that humans have a prevailing position (Ranisch and Sorgner 7; emphasis in original). The exceptional and superior position of the human is subdued with posthumanism, as well as with the pioneering studies in the field of zoology, which pays particular attention to animal cognition, behavior, and psychology. However, long before posthumanism theory radically challenged the anthropocentric and traditionalist humanist perception of all life that prioritizes human beings over the non-human world, the idea that all forms of life are in fact not different from each other, but rather that the quintessence of all life is one and the same, and that there should not be an order based on dualities, was put forward by the Portuguese-Jewish philosopher Benedict de Spinoza in the seventeenth century. Rosi Braidotti reviews Spinoza's philosophy on the ontology of life, and she interprets his view by stating that "matter, the world and humans are not dualistic entities structured according to principles of internal or external opposition … for Spinoza the concept goes even further: matter is one, driven by the desire for self-expression and ontologically free" (Braidotti 56). In Spinoza's philosophy, therefore, there is no question of dualities (where human, men, and culture are always prioritized over animal, women, and nature); on the contrary, according to Braidotti's interpretation of Spinoza, matter is one, we are one. It means that human-animal, men-women, nature-culture are not the biased and contradicted pieces of a whole; they are the whole itself. There is no exceptional human and devalued animal; human and animal are one. In this regard, Spinoza's understanding of ontology can be related to Deleuze and Guattari's

rhizome metaphor as this metaphor is used to explain the multifaceted growth of knowledge rather than a flat and hierarchic one for the philosophers. Since it points to not an arboreal but a multifaceted growth, it can be and is applied to the description of the flat ontology that posthumanism suggests. Their metaphor, therefore, can serve as a model of ontology that Spinoza once proposed. In other words, Deleuze and Guattari's rhizomatic thinking points to a "radicle-chaosmos rather than root-cosmos" (6). Braidotti considers this "Chaosmos" as "the universe of reference for becoming in the sense of the unfolding of virtualities, or transformative values" (93). 'Transformative values' here is the key term: In the universe of chaosmos, the assigned values have to shift in terms of a new, flat ontological order among all living beings. The shifting idea about humanity and animality is and should be pointing to a post-anthropocentric and post-dualistic terms, both in terms of the biological and cognitive boundaries. Hence, it means the desertion of the Cartesian dualistic comprehension of the world, which prioritizes and values only human logos and body. However, a new ontological order, in which every entity of nature is valued equally, should be established. As Nayar emphasizes, "this new ontology has irreversibly altered the presumed human sovereign control over temporal and spatial boundaries" ("Posthumanism" xv). A new, flat ontological order promotes the idea of equal intrinsic value, rather than the use value (of animal or human), as well as the temporal and spatial boundaries that are now realized to be too easily crossed.

In the novel, rather than an equal value appraisal, there is an equal ascription of worthlessness on both nonhuman and human beings. The mad scientist Dr. Franklin is so blinded with his aim that he attributes equal devaluation to everyone, both the animal and human life. He admits the only way he triumphs his life-long dream is to utilize human bodies. Divulging that he has exploited countless animal bodies so far, he declares: "We've gone as far as we can, infusing human genetic into dumb animals … *we* have to have human trials. It's only the next step" (Halam 74; emphasis in the original). Human trial is the next step for his transgenic experiments as his ultimate aim is to create a living transgenic being made of human and animal parts. It highpoints Dr. Franklin's speciesist and anthropocentric position as he does not assign value to anything but himself and his pursue of creating a living trans-species. Moreover, Dr. Franklin manipulates Semi and Miranda by trying to encourage them to volunteer for the experiment. He makes them believe that they will be the triumphs of the experiment: "You'll serve the cause of human

progress. You will become more than human! Look on it as a great adventure" (Halam 75). Therefore, while the twenty-first century mad scientist character Dr. Franklin swings between the potentialities of posthuman hybridity with a novel species (neither solely human nor animal but both human and animal), he proves to build the monument of humanist, speciesist, and anthropocentric ideologies with his works. It is because all technological and biological developments, all living beings are merely instruments for Dr. Franklin. The Cartesian dualistic grasping of human and other animals is collapsed since he uses human beings as subjects; however, this desertion of dualism does not bring any post-anthropocentric and post-dualistic stances with it. By contrast, there is an equal worthlessness of human and animal life in the pursuit of scientific developments. A controversial shift as such, thus, raises moral and ethical questions that need to be attended in relation to the ambiguous status of the human and nonhuman experimental subjects in science. Hence, Dr. Franklin does not represent a fully shifted model of ontology between human and other animals where each member of nature is equally valued out of their intrinsic value. By contrast, Dr. Franklin both devalues and rejects the subjecthood of humans and other animals in the way to realize his dream of creating transgenic life forms.

While devaluing both human and animal life, ironically, Dr. Franklin wants humans to re-discover their animality as he knows that some animal skills, especially physical skills, are deemed to be superior to human physical capacity. Other animals have better adaptation skills for survival in nature than any human being. This is Dr. Franklin's way of thinking as a twenty-first century mad scientist who also holds up the power of advanced scientific facility. As Joan Gordon aptly argues in the chapter "Animal Studies" in *Routledge Companion to Science Fiction* that until recent years, both in philosophical and practical realms, animal body and animal life have been disregarded from Aristotle to Descartes, to Heidegger in the twentieth century. However, with the new millennium, with the help of animal studies, the perception of animal and animality have changed, and Gordon further states:

> In the new millennium, animal studies has continued to emphasize similarity over difference, describing the relationship of humans to other animals as a continuum rather than a division, echoing the discussions in sociobiology that ascribe "animalistic" traits in humans and traits previously associated only with humans, such as tool-use, language, cultural and psychological variety, to animals. (338)

Therefore, the reason why Dr. Franklin attributes importance to animality is the rising voice of animal studies in the twenty-first century, not because he ethically treats animals qua individuals, ascribing value to their subjecthood. The reason for prioritizing animality, besides the rising voice of animal rights in the twentieth and twenty-first centuries, is that "humans and animals are related evolutionarily (using the field of evolutionary development) or psychologically (using evolutionary psychology), or they consider the implications of animal behavior (ethology)" (Gordon 331). Even though Dr. Franklin realizes this fact, as if he were jealous of the fact that humans are not equipped with survival skills that animals have, Dr. Franklin tries to attribute these properties to humans: "Imagine being as strong as an elephant. Imagine being able to use sunshine to make food, like a plant. Imagine being able to fly like a bird. Imagine being able to breathe underwater, and swim with the fish. Imagine … though this is farther off, I admit ... being able to breathe different gases, or live comfortably in the hard vacuum of space" (Halam 68). By becoming living transspecies combined of human consciousness and animal skills, Dr. Franklin thinks: "We're going to be made more than human, we're going to have superpowers" (Halam 91). By valuing the human-animal hybrids, Dr. Franklin pictures hybridity as a superior way of living. Therefore, instead of being solely human or animal, the merger of those two can be a higher living organism. In other words, as Yampell argues, for Dr. Franklin, "[t]hrough a subtle privileging of hybridity and the ensuing implication that 'becoming animal' may constitute an evolution rather than a devolution" (208). The animalized humans in the novel, therefore, point to an evolution for human race, rather than devolution, and it is ironic that Dr. Franklin pursues this dream for the sake of human and capital. That is, these transgenic experiments do not serve the welfare of animals, but only that of the humans. Even though he subverts the traditional anthropo-normativity by giving his brand-new hybrids animal bodies, they still have human logos. They become, in Dr. Franklin's words, "super-humans."

A purposive shift observed in the representation of the leading mad scientist Dr. Franklin underlines an appreciated animality and animal survival skills in nature. He seems to be embracing a posthumanist grasping of all living beings, where he values animals out of their intrinsic values rather than use value. Though, his utterances such as, "imagine flying like a bird" and "imagine being able to breath under water like a fish" or "imagine being strong as an elephant" (68) do not indicate a state where he respects the

ontological or inherent values of animal, nor he sees himself as equals with them. Rather, this intentional shift on the debate of human and animal depicted in *Dr. Franklin's Island*, points to a more radical anthropocentric and speciesist ideology developed and intertwined with the advanced technological possibilities. Hence, no evident change in the relationship of human and animal in terms of intrinsic value, ethics, and moral has occurred since what Jacques Derrida observed about humanity in *Of Grammatology* in 1967:

> Man *calls himself* man only by drawing limits excluding his other from the play of supplementarity: the purity of nature, of animality, primitivism, childhood, madness, divinity. The approach to these limits is at once feared as a threat of death, and desired as access to a life without differance. The history of man *calling himself* man is the articulation of *all* these limits among themselves. All concepts determining a non-supplementarity (nature, animality, primitivism, childhood, madness, divinity, etc.) have evidently no truth-value (244–245; emphasis in original).

Derrida finds human —both as a term and a species— problematic because man is only human insofar as he stays within the boundaries he has drawn, insofar as he follows the rules humanity has created to define itself as human, and insofar as he moves away from animality. When he goes beyond the social, cultural, and historical boundaries of these subsequently drawn borders, he is left with nothing but his own animality. In other words, all the *humane* qualities that humanity has associated with himself; "[t]hey have meaning only within a closure of the game" (Derrida, *Of Grammatology* 245), that is, they are only meaningful within the scope of humanity and do not have any meaning in nature. Even though human's biology and physiology is "the closest and most intimate" (Agamben 16) to animals, human has never been an embracing term which assigns value to all members of nature on a flat ontology, by contrast, human is human because *he*[7] draws imaginary boundaries between human and what he recognizes as nonhuman.

What Dr. Franklin depicts with his ideology is not a post-anthropocentric point of view since posthumanism refers to an ethical and a philosophical debate whose aim is to aspire transcend anthropocentric viewpoints and place a higher priority on the wellbeing and intrinsic value of all living things as well as the environment as a whole. It contradicts the conventional anthropocentric viewpoint, which frequently prioritizes humans over

[7] Here, the pronoun 'he' is a deliberate reference to the term phallogocentrism which is coined by Jacques Derrida and first mentioned in his book *Of Grammatology* to criticize and deconstruct the binary thinking that the cultural patriarchy imposes on human thinking. According to Derrida, phallogocentrism promotes "[t]he notion of the sign always implies within itself the distinction between signifier and signified" (11), which compels individuals to conceive in binary terms.

non-human beings when determining morality and values. In other words, post-anthropocentrism opposes the prevalent anthropocentric paradigm and promotes a more ecocentric, biocentric, and holistic view of our collaboration with nature. It urges a change in beliefs, behaviors, and laws to promote a just and sustainable cohabitation of all creatures since, as British posthumanist ecocritic Timothy Morton states, "we are not ourselves, if by that we mean independent and singular beings, but are made up of others" ("Ecology as Text" 7). In other words, neither our bodies nor minds are independent; by contrast, we are all made up of non-human world. Further, Morton aptly discusses that "the human as such is already nonhuman" as "[t]he oxygen we breathe, the iron we smelt, the oil we burn, the hills we walk on are byproducts of the metabolism of life forms. We need a term like 'coexistentialism' to describe what it feels like to be a swarming colony: we contain multitudes" ("Deconstruction" 301). In this regard, distinctions such as human-animal or humanly-animalistic would prove themselves to be invalid as we are all, referring to Morton's words, byproducts of metabolism of life forms. In other words, human is animal and animal is human; we are the byproducts of same natural processes.

Dr. Franklin, on the other hand, does not reflect any of those posthumanist ideas that are brought to discussion in terms of human and animal ontology, biology, and life, in general. He sharply distinguishes human and animal ontological values in his mind, though he acknowledges the biological permeability and fluidity. In other words, Dr. Franklin accepts that human and animal are not so separable in terms of biological differentiations, yet, he still classifies human ontological and epistemological value over the animal's. The following words of Semi clearly display Dr. Franklin's mindset: "I was human again, but I knew that what Dr. Franklin saw was still an animal, a thing to be used" (Halam 211). Hence, Dr. Franklin is the representation of a shifted and radical anthropocentrism which is strengthened with advanced technology, even though he ironically swings between posthumanist potentialities.

Dr. Franklin progresses his experiment by taking them to the next level, injecting Semirah a manta ray's, and Miranda a bird's gene. Although the transformation process is not painful and observable, Semirah explains her concerns about being injected with the fish DNA:

> We'd had our first infusion of artificial DNA. The thing was done. We were transgenics. When the changes in our cells reached critical levels, we were going to be completely helpless. We'd die if we weren't in his care … He'd used pieces of original animal genes as his basic material, but the final product, that had been injected into us, was *new* —genes that he'd created, that had never existed before in the world. He said we'd still be human, when the treatment was successfully completed, but *more than human*. (Halam 104-105; emphasis in original)

Every day little by little, they would lose some human limbs and gain the characteristics and physical traits of a fish and a bird. With terror, they have to observe both themselves and each other's bodily transformation in a single room that they are supposed to stay in together. One day, Miranda loses her speaking skill, and Semirah narrates the change in her sound in horror: "Do' mi 'oice 'ound staynge?" (Halam 113). Miranda herself is also aware of her awkward speaking. Not only because her bodily transformation but also through the absence of human language as it is considered to be a decisive barrier in deciding what human is and what it is not.

Besides the transformation process that Miranda has been going through, Semi is also having some changes in her body too:

> When I looked in the mirror, I saw marks like bruises on my neck. When I touched them, the skin came apart under my fingertips. It was as if two rows of little wounds had opened in my throat, from the inside: but there was no blood. I was glad … I saw that the keel of her breastbone had burst through the skin, and the raw flesh was oozing blood and clear fluid. I could see the bone, all white, and the thick bands of gleaming purply red, which were the new muscles. (Halam 116–118)

Just like a snake, her skin is coming off and the fish scales start showing from underneath. In meanwhile, she can see her own bones beneath. However, it is not, she says, a painful process. As Miranda's transformation is faster than Semi, she says on the day sixty-three "I couldn't hold her hand anymore, because she didn't have any hands" (Halam 119). Day by day, they welcome their new animal bodies while being able to observe the change with human consciousness. Having a human logos and an animal body is the merger that makes things different: They are animalized but they still have human brain capacity. In this regard, Semi states, "better to be a monster than to be a prisoner on this island and have a human mind" (Halam 212–213). Semi's perception shift about becoming animal points to an acceptance of their new bodies when compared to having a human mind and being a prisoner.

Upon becoming transgenic living forms, their stances on what it means to be an animal or human are drastically shaken. Since they are the combination of animal body

and human logos, they go through not only a physical change but also a shift of perception. The idea of being transgenic, which once seemed a nightmare for them, becomes a pleasant idea especially once they have fully recovered in their animal bodies and are able to live like a real bird or a fish. For Miranda, the change in her perception is significant as she starts to see the world from a different angle as a bird since she can fly now and has more acute sense of sensory. She could adjust to her new life on the island because her thoughts and actions become more natural and in sync with her bird shape. For Semi, changing into a manta ray causes a major shift in viewpoint as well. She develops an awareness of the wonders of nature and the interdependence of all living things. She has heightened intelligence and the capacity to interact with Miranda as a result of the chip implanted in their brains. As Semi experiences the world as fish under the water, her awareness of it grows and she accepts her new manta ray persona and integrates herself into the nature of the island. Cat Yampell describes Semi's state of mind thoroughly: "Semi acquiesces to the sheer joy, peace, and beauty her manta-ray self provides. As readers are permitted access to the thoughts and emotions of the animal/human-animal hybrids, the animals become more than experimental bodies or objects; they gain subjecthood" (212). This new hybrid subjecthood allows the reader to observe their experiences as they become animals as Semi explains, "I was adapting, my brain making new connections, my new senses plugging in and testing themselves" (Halam 121).

The fish narrator Semi provides insights upon turning into animals as having a fish body along with human logos and a chip implanted in her brain by revealing the shift in her body and also the mental state. After the transformation process is complete, for example, Semi's eyesight is corrected. In other words, the transgenic experiment she has gone through paves the way for an unexpected result in her vision: She no longer needs glasses to see. Further, her animal body provides all the instincts she needs to survive. She explains her first experience as follows:

> At last, I opened my eyes. The first tremendous shock was that I could see, perfectly. The world didn't look anything like the blurred world I'd been used to seeing since the plane crash —the same blurred world that I'd lived with all my life, whenever I didn't have my contact lenses in or my glasses on … I gave a kind of start, and a jump… which is when I realized that my legs weren't dangling extra things anymore, they were *inside* me as well. When I 'kicked' (the word belonged to that old stick-figure Semi, it was no use anymore, I'd have to think of other words), my whole body responded. I went flying forward, backward, up, down, with perfect control, any direction I wanted. I was free, so free. (Halam 122–123)

She welcomes her new body: a fish body combined with human mind. Not having legs and arms, Semi states that when she moves, her whole body reacts. Moreover, as she expresses, she has perfect control over her fish body. And in order to see from her fish persona, all she has to do is "to flip some mental switches to sort it into human terms, like wide-screen TV being squeezed onto a square screen" (Halam 124). Semi further explores living in a manta ray body by describing what eating feels like "so far, the strangest thing about being a fish: eating is like breathing. I don't feel as if I'm doing anything" (Halam 137). While she explores her new body and subjecthood, Semi is surprised to see the things she can do and know right now. As an example, Semi describes her astonishment upon realizing the difference of seawater and the fake aquarium substitute:

> I'd realized, after swimming around in it for a while, that my water was genuine seawater—not fake, saltwater aquarium substitute. Semi-the-girl wouldn't have known the difference, but Semi-the-fish couldn't be fooled about things like that. In my dual-nationality mind, it was as if I remembered everything that a natural-born tropical manta ray would know. Only better than remembering, because this wasn't like Semi-the-girl remembering facts she'd learned, and sometimes getting them wrong. It was certain knowledge, like knowing the difference between light and dark. These "memories" must have come from the fish DNA that had been grafted into my human DNA. But because I was girl as well as fish, I could think about my inbuilt animal knowledge with a human mind. I really enjoyed that. (Halam 145)

The injected fish genes enable Semi to distinguish between the original seawater and the fake aquarium water. This, however, is not strange as every fish already may recognize the difference of the two. What is different is that the insights provided by the fish genes are combined with the human logos. She describes being an animalized human as having a dual citizenship because she is able to switch on and off one another. She experiences her animal persona as if it was innate, as if she was born like this; she does not learn fish skills but just knows them. That 'certain knowledge' of Semi, in other words, is "instinctual epistemology" (Norris 3) that is transferred to Semi's DNA through fish genes. However, she feels good "and delighted with [her] new body" (Halam 124).

Semi's new instinctual epistemology, enabled by the fish DNA inside her body, has given her new instincts and knowledge on being an animal, but this new state of hers has also obliterated an emotion that is unique to human beings, that is, ecophobia. Ecophobia is a term coined by ecocritic Simon Estok, and the term is derived from "eco" and "phobia," meaning "irrational fear of nature and hence [it] has created an antagonism between humans and their environments" (1). Estok claims that this phobia towards nature has originated from modernity, in which

> humans sometimes view nature as an opponent, [it] can be expressed toward natural physical geographies (mountains, windswept plains), animals (snakes, spiders, bears), extreme meteorological events (Shakespearean tempests, hurricanes in New Orleans, typhoons), bodily processes and products (microbes, bodily odors, menstruation, defecation), and biotic land-, air-, and seascapes (every creeping thing that creepeth, every swarming thing that swarms, partings of—and beasts from—the sea). The ecophobic condition exists on a spectrum and can embody fear, contempt, indifference, or lack of mindfulness (or some combination of these) toward the natural environment. (1)

Modern human beings, according to Estok's explanation of the term, have further distanced themselves from nature by viewing it as a kind of rival to themselves. In other words, instead of seeing it as the home of all living creatures, modern human beings have started to see it something to be dreaded or detested. Phobias easily pave the way for indifference towards nature which is highly dangerous especially in the twenty-first century where ecological crisis has started to be observed in daily life weather events. Thus, Estok's term ecophobia aptly criticizes this illogical fear towards nature, intensifying the already existing problematic and anthropocentric existing of humans. Ecophobia, then, is the term that describes the gradually and constantly widening gap between humanity and rest of nature by developing an irrational set of emotions.

In the novel, before acquiring her manta ray persona and body, Semi also displays ecophobic qualities. However, her traditionally and widely adopted anthropocentric and speciesist attitudes change to a more ecocentric one after turning into a fish. The species to which she once referred as 'dumb animals' now provides her another way of perceiving nature: being under water, swimming along other fish, sensing the direction differently, having a better vision. Semi describes the change she has been going through as follows: "I had been so terrified the one time I saw a big shark in our lagoon, though I was standing on dry land on the coral causeway. Now I was swimming along without a care, thinking: So, a shark may come along and bite my leg off, well, accidents will happen" (Halam 204–205). When Semi becomes an animal, she is freed from her anthropocentric ecophobia. Her mode of thinking is transformed from an anxious state to a calmer one with her new animal persona. So much so that she eventually forgets about what or how it feels like being a human. Semi the fish is now a part of nature as her animal self allows. She can hear the music of the ocean and see other animals as she is one of them. She is courageous enough to openly admit that she relishes her animal persona better and is happier, more peaceful, and unflustered this way.

Semi's new animal persona provides her with a more ecocentric perspective in which she experiences a humanimal state of being as well as knowing. This new mode of being brings her calmness, joy, and 'instinctual epistemology' as she can make a differentiation between sea and pool water as if she was born as a fish. However, before she was injected fish genes into her DNA, she was an American teenager with traditional opinions about humans and "dumb animals" (74). Even though her state of transformation into an animal suggests perspectives aligned with trans-speciesism and post-anthropocentrism, from the beginning of the novel to the state where Semi and Miranda were dangerously frightened with the idea, their point of view remained speciesist and anthropocentric. In other words, before becoming transgenic living beings, Semi was a proponent of anthropocentric and speciesist ideologies. It is because "[h]uman culture is separated from nature, which is seen as the NHA's [nonhuman animal's] domain. This anti-human condition of being an 'animal' represents the distinction between 'natural' behaviors devoid of values or reasons and the process humans go through to become enculturated and overcome this animality" (Freeman 13). In other words, human beings have been shaping their own world of law, rights, cities, language, and every other formation that is human-made in which other animals and nature are only seen as raw materials to be patched into the world of the human. In an environment which is interfered and altered with human agency along with the advanced technological possibilities, humans can easily feel as being outers and exceptional than rest of nature because:

> It is possible to oppose man to other living beings, and at the same time to organize the complex—and not always edifying—economy of relations between men and animals, only because something like animal life has been separated within man, only because his distance and proximity to the animal have been measured and recognized first of all in the closest and most intimate place. (Agamben 15–16)

However, novel ideologies like posthumanism suggest new modes of being where there is no hierarchy but equality among all living beings. It is because, as Haraway argues in *Companion Species*, all acts of humans are parts of the intra-actions of 'nature' and 'culture,' and as Haraway further observes, "[f]lesh and signifier, bodies and words, stories and worlds: these are joined in naturecultures" (4). What Haraway implies by 'naturecultures' is the mutual way of being, the interconnectedness, or the interrelatedness of human culture and the whole nature. Both affect and are affected by each other, just like the transgressions along the human and animal borderline observed both in real life and in its literary representations. COVID 19, for example, is one of the

most recent and relevant examples of the permeability of these "naturecultures" (Haraway, *Companion* 4) since "[o]ne virus has demonstrated how much interconnectedness constitutes the life— sustaining environment the human life form occupies" (Nayar, "Posthumanism" xv). These transgressions between nature and culture, in a similar way, are interpreted by Derrida as the "bordercrossings between *bios* and *zoē*" (*The Animal* 24; emphasis in the original). The boundaries that human beings have established between humans and animals have in fact been and continue to be crossed, whether people realize it or not. It is because as French philosopher, anthropologist, and sociologist Bruno Latour states in *We Have Never Been Modern*, human and animal "were created together. They reinforce each other" (31). What is to be ensured, then, is the fact that humanity is and will be a part of nature and animality, sharing with and affecting each other more than assumed.

Humanimality, as a term, may both refer to the animality inside the human biologically, physically, and cognitively, as well as to the hybridity and trans-species living beings epitomized in the literary representations. Even though Derrida does not use the term humanimality explicitly, the arguments he introduces in the discussion of human and animals coincide with the ideas emphasized by the term humanimality. In *The Animal That Therefore I Am*, he scrutinizes the transgressions along human and animal borderline and concludes with the fact that there *is* an end of the man as Derrida states: "Passing across borders or the ends of man I come or surrender to the animal, to the animal in itself, to the animal in me and the animal at unease with itself" (3). Outside of the constructed human and humanity, one surrenders to animal, to the animal inside, or the humanimality itself. At the ends of the constructed human, there is animal. Freeman's interpretation of Derrida reveals that "humanity's animality (humanimality) is not surprising" (Freeman 12). In this regard, humanimality is a term that encompasses the literary examples of human and animal hybridity and transgenic living beings, underlining the ways in which human and animal are intermingled together, as well as suggesting post-anthropocentric and post-dualistic modes of living.

The state of humanimality does not require a bodily shift; by contrast, it is the state of mind in which one should recognize the animal in humanity. What Francesco Ferrando argues about the concept of posthuman, which she appreciates as a process of

cognitive realization that develops in philosophical posthumanism with the ideologies of post-anthropocentrism and post-dualism, coincides with what the term humanimality suggests. To Ferrando, "accessing the posthuman as a post-anthropocentrism" (*Philosophical* 103) is the only way of becoming posthuman according to the posthumanism's understanding of the subject, rather than suggesting a bodily change which is made possible via technological possibilities. Ferrando further explains what posthumanism mean by the term posthuman: "According to Posthumanism, we can be posthuman now in the ways we are existing, in our modes of enactment, in our relating to others and to ourselves as 'others,' through the deconstruction of the human approached in light of post-humanism, post-anthropocentrism, and post-dualism" (*Philosophical* 188). The posthuman of posthumanism, then, does not assume a bodily-technological change in order to become stronger in terms of physical endurance or immortality; on the contrary, according to Ferrando, we can already be posthuman right now, because all that is needed to become posthuman is a radical change in perception. In other words, to be a posthuman, the traditionally recognized human supremacy must be deconstructed. Thus, the posthuman states necessitates a cognitive awareness. Therefore, what Ferrando means by posthuman and what Derrida and other related philosophers mean by humanimal is that it is easy to observe animalized humans and humanized animals as they are one. In other words, we were never humans until we are posthumans (Halberstam and Livingston 8). We are humanimals only if we reach the posthuman state of being.

What Ferrando means by the term posthuman and what is represented by the term humanimal do indeed intersect in meaning. These intersections are fully represented by the animalized human characters: Semirah, Miranda, and Arnie. Semi's new persona as manta ray, for example, points to a humanimal state, giving her the chance to experience the amalgam of both fish instincts and human logos. Not necessarily because she has gone through a physical change but mainly because her perspective towards what it means to be an animal, or a human has radically changed. In other words, Semi now reaches a humanimal condition made possible through, in Semi's terms, "dual nationality" (135) of her human-teenage self and her manta-ray self. Additionally, she is jubilant being a humanimal.

> Miranda-the-bird and Semi-the-fish know everything they need to know. They eat, sleep, move, react like the animals they are. All we have to do is learn to sort of keep our human thoughts out of the way, and everything just happens. Miranda says it's like having dual nationality. You're officially two people, but you don't feel anything odd. (Halam 135)

In this regard, the anthropocentric and speciesist Dr. Franklin's transgenic experiments resulted with a posthuman potentiality in terms of being a humanimal for Semi, Miranda, and Arnie. Even though Dr. Franklin's primary aim is not to create a new hybrid species who is ecocentric, post-anthropocentric, or post-dualist, and who is ruptured from the problematic nature of being human, the outcome of his experiments swings between the posthumanist potentialities, which, therefore, paves the way for "inscrib[ing] a new ontology for the humanimal" (Valderrama 13). This new ontology necessary for the ascription of humanimal is well provided by the terms posthuman and humanimality, enounced by posthumanism. Thus, being humanimal and posthuman require the stances of post-anthropocentrism and post-dualism which is experienced by Semi after she gains her manta ray perspective and the body.

What sort of humanimality, then, do Semi, Miranda, and Arnie experience in the novel? Still having their human consciousness, thanks to their bodily transformation into animals, they come to realize what it truly means to be *in nature* while flying in the sky as a bird and swimming under water as a fish. At this point, it significant to note what they are going through is made possible when the two come together. It does not mean to abandon the logos altogether. Humanimal, then, should indicate the combination of humanity and animality, the junction of the two where we welcome both humanity and animality.

Another point to be analyzed in this humanimal living being is the clothing issue before and after Semi is turned into a fish. Towards the end of the novel, Arnie, who is believed to be lost, appears to be alive and is turned into a snake by Dr. Franklin. Yet, as he uploaded a chip in Arnie's mind too, all Semi, Miranda, and Arnie now can communicate with each other. Arnie explains his own situation to Semi and discloses the fact that there is an antidote with which they can turn into their human selves again by drinking it at regular intervals. Upon taking the antidote, Semi gets her human body back. However, she feels ashamed of being naked, she immediately gathers her old human consciousness back and complains about having no clothes on. "*What am* I?" she states, "I was a soaking wet teenager, with no clothes . . . I sat there happily amazed, wishing I

had some clothes" (Halam 208; emphasis in the original). An animal does not have such concerns, Semi did not have such concerns when she was an animal, it is because as Derrida states, the animal "is naked, without existing in nakedness, the animal neither feels nor sees itself naked. And therefore it isn't naked" (*The Animal* 5). Yet as soon as she gets back her human-girl-body, the feeling of shame appeared with it. Semi "could never be naked anymore because [s]he has the sense of nakedness, that is to say, of modesty or shame" (Derrida, *The Animal* 5). However, it was not the case when she was an animal because "[t]he animal would be in non-nudity because it is nude, and man in nudity to the extent that he is no longer nude" (Derrida, *The Animal* 5). No other animal has ever thought to dress, cover his/her body with a piece of fabric, except for humanity. Therefore, "[c]lothing would be proper to man, one of the 'properties' of man" (Derrida, *The Animal* 5). Semi, hence, is interrupted with an immediate need to cover her body with the feeling of shame after turning human again, as if nakedness is not something natural. Yet, when she was a humanimal, her fish body did not cause her such problems of clothing.

To summarize, Ann Halam's young adult sf novel *Dr. Franklin's Island* portrays an intentional shift in the representation of the mad scientist trope, Dr. Franklin, who urges his human experimental subject to re-discover their animality, appraising animal skills such as flying or being able to breathe under water. Moreover, this shifted mad scientist figure also appraises hybridity, trying to create his own super-humans made up of animal DNA, animal body, and human consciousness. Even though the hybrid Semi and Miranda admittedly enjoy living in animal selves which also provide them instinctual epistemology about their animal personas, fish and a manta-ray, Dr. Franklin does not rupture himself from anthropocentric and speciesist qualities as his only aim is to create his own super-humans, exploiting both human and animal during this process. In other words, Dr. Franklin is a more radical anthropocentric mad scientist who is updated with the awareness of the recent discoveries about the animal intelligence and the other cognitive and biological similarities between human-animal as well as with the recent developments in biotechnology field. However, Dr. Franklin's story proves that the core of human and animal relationship has not changed even though some major studies are undertaken to claim that the term human is nothing but a social construction. Quite the opposite, the major biotechnological developments in the twenty-first century, and all

these new developments lead the way for humans to find more extractive and highly unethical ways of exploiting animals for their own selfish purposes.

Therefore, this chapter concludes with the idea that in the twenty-first century we can understand that human is nothing but a social and historical construction, and when these temporal and spatial phenomena are eliminated, humans are doomed to *re-discover* their animality; however, the human-animal relationship is still anthropocentric and anthropo-normativity is still promoted since this disease of anthropocentrism —as Ferrando refers to— has become ingrained and hereditary for humanity. Hence, even though the mad scientist of this novel Dr. Franklin is also aware of that animality is as superior as humanity, human and animal relation still relies on anthropocentrism for him. In other words, humans who are inherently anthropocentric, do not simply recover from this anthropocentric ideology, by contrast, they reshape this anthropocentric relationship in a more radical way. With the combination of science fiction's exploration of the animal question, therefore, the posthumanist reading of the *Dr. Franklin's Island* helps reveal the fact that how the anthropocentric mindset is embedded in human, as well as the fact that how blurred the borderline between animal and human is.

CONCLUSION

Towards the Humanimal: A Just Future for Every Being

Man is an invention of recent date. And one perhaps nearing its end.

— Michel Foucault, *Order of Things*

Passing across borders or the ends of man I come or surrender to the animal, to the animal in itself, to the animal in me and the animal at unease with itself.

—Jacques Derrida, *The Animal That Therefore I Am*

Through a critical lens that posthumanism provides, this thesis has analyzed *The Island of Dr. Moreau* by H.G. Wells and *Dr. Franklin's Island* by Ann Halam to point out and deconstruct anthropocentric and speciesist notions embedded in them, whether easily observed or not. Both novels shed light on the difficult and complex interactions between human and animal and lead us to decipher the anthropocentric tendencies that are deeply rooted within individual and societal patterns. The exploration of hybridity, which is presented as a preferable mode of being in *Dr. Franklin's Island*, the collapse of human exceptionalism and animalism, and the blurring of the cognitive and physical boundaries may seem to favor post-anthropocentrism as they suggest the end of anthropocentrism. However, neither *The Island of Dr. Moreau* nor *Dr. Franklin's Island* suggests posthumanist notions since both mad scientists serve anthropocentric ideals in their own ways: through vivisection in the nineteenth century to transform animals into humans and transgenic experiments; in the twenty-first century to alter human into animal body. In other words, both novels show us how hybrid species could create posthuman living forms, but it is important to note that the characters —especially the mad scientists— remain mired in the web of anthropocentrism, which has disastrous consequences especially for their nonhuman environment. Though it is ironic to create new life forms, namely human and animal hybrids, who challenge the conventional

classifications of beings, the scientists themselves stay trapped in the deeply ingrained anthropocentric worldview that shapes their existence, perception, and thought processes.

The first chapter of this thesis has analyzed Wells's dystopian sf novel and presented Dr. Moreau as a figure representative of anthropocentric values that rigidly put humans before animals. That is, the nineteenth century mad scientist trope serves anthropocentric and humanist ideals who do not consider animals individual enough to attribute intrinsic value to them. Further, the vivisection experiments that are portrayed in the novel blur the lines between what is considered normal, and also it encourages readers to challenge traditionally-structed notions about animality and humanity. The conflict between anthropocentrism and boundary violations provides an ideal context for understanding the complex relationship between the lives of humans and animals. Contrarywise, there are two aspects that prove Dr. Moreau wrong in his belief that he should burn out all the animality inside the animals: superseding of repressed animality of the Beast Folk following Dr. Moreau's death and Prendick's re-discovery of his animality after spending a lot of time with the Beast Folk alone. I should also underline that what Prendick goes through should not be considered as a devolution as devolution and its connotation suggest a negativity, a failure. Rather, stranded on the island alone with the Beast Folk, Prendick re-discovers his own animality outside of any societal constructed reality which helps him make sure that he is a human being. The constructed denaturalized human self deserts him day by day as there is nothing to remind him that he is a human. Thus, instead of a devolution, it should be considered as a realization process for Prendick in which he remembers his animal substance. The first chapter concludes that besides burning the animal inside the animal, anthropocentric Dr. Moreau is further proven wrong with Prendick's animalization since human is nothing but an animal outside of the social and historical constructed borders that keep humans tamed.

The second chapter has explored anthropocentrism which is combined and radicalized with highly developed biotechnologies as well as capitalistic ideals put forward by Dr. Franklin through living trans-species, that is, human-animal hybrids who are in animal bodies yet still have human consciousness. Yet, it is possible to observe engrained anthropocentric web of discourse, mindset, and behavior patterns in *Dr. Franklin's Island*. The amalgams of human consciousness and animal body call into

question the established definitions of human and animal, and force readers to reconsider the anthropocentric foundations of social and historical structures. As the plot unfolds, it becomes clear that these trans-species —or hybrids— transcend the physical world and touch upon morality, ethics, and the fundamental essence of morality, ethics, and what it means to be human and how it is really different from being an animal. The entangled swinging between human and animal borderlines, both cognitive and physical, prompts us to revisit our relationship between the rest of the world, offering a more holistic, ecocentric perceiving of existence, in Ferrando's words, an opportunity to heal from this "disease called anthropocentrism" (Ferrando, "Posthuman Healing" 250). Moreover, *Dr. Franklin's Island* describes a capitalist ideal, which is given as an undertone in the novel. In this capitalist vision, Dr. Franklin seeks to establish a tourism wherein people would take a pill which enables them to mutate into an animal shape that they desire to explore, providing a unique experience of living in an animal body. The cyclical nature of this enterprise appeals particularly to capitalist goals because participants can take another pill to revert to their human form. Such a notion introduces an entirely novel form of entertainment and capitalization while also erasing the conventional lines between human and animal interactions in a way that has never been investigated before and is heavily commercialized.

Both novels similarly encompass the representation of mad scientists, Dr. Moreau and Dr. Franklin, who play a god-like role upon their animal and human experimental subjects. The difference is, while through Dr. Moreau readers can only observe Dr. Moreau's or his Beast Folk's attitudes, discourses, and at most Prendick's comments about the relationship between Moreau and the Beast Folk, in Dr. Franklin's account, there is a real animalized human narrator who admits that their subjecthood is removed by Dr. Franklin, who turns them into animals. This shared motif of playing a god-like role over their experimental subjects, whether human or animal, accentuates the egocentric tendencies of the mad scientist stereotype. Moreover, it can also serve as a metaphor for all human beings who attribute themselves the role of god and assume that they can/should make decisions about nonhuman others such as which animals to eat, which ones to use as experimental subjects, or which ones to make furs from. Thus, these egocentric mad scientist representations that are apparent in both of the novels may invite readers to reconsider the moral boundaries of scientific research, and exploitation of

animals for food in daily life, slaughterhouses, and laboratories, as well as the hubris that comes with being a creator.

There are, however, different elements to compare between the novels as well as the mindsets represented through the mad scientists and their victims. While anthropocentrism is prevailing in both of the novels' discourses, there is a sharp distinction between these narratives in terms of their perception and representation of the human. In *The Island of Dr. Moreau* human representation aligns well with humanism and anthropocentrism as it represents a man who is the measure of all things. With this idea engrained in his mind, Dr. Moreau shapes and carves animals into human bodies, which has an aesthetic value or artistic beauty for him. However, *Dr. Franklin's Island* does not explicitly advocate anthropocentrism or anthropo-normativity because Dr. Franklin, as a shifted representation of the mad scientist figure in the twenty-first century, seems to embrace post-anthropocentrism and post-dualism ideologies. The reason why Dr. Franklin may easily be considered as a mad scientist figure who is ruptured from the problematic and toxic position of the human is that he prioritizes animal survival skills over humanity, or at least he seems to favor that. However, just like Dr. Moreau, he also aims to serve humanity through his scientific research without considering his devastating effect on the nonhuman environment.

Another essential difference between the novels is the process of transgressing the animal and human borderline itself. While in *The Island of Dr. Moreau*, the process of becoming one of the Beast Folk, whose screams are heard all around the island, is a brutal and agonizing process, the transformation process in *Dr. Franklin's Island* is quite painless. This is mentioned several times by the narrator Semi. According to her, becoming a fish is not something painful they have to go through, they even appreciate that they do not see any blood coming out. They acquire an instinctual epistemology after becoming animals, as well as experience a painless metamorphosis of bodies, akin to the shedding of a snake's skin. Hence, their onto-epistemological state shift in tandem with their bodily change, and they grow accustomed to different point of view and physical abilities that their animal selves allow. Considering that this radical shift in their opinions help them gain a nonhuman animal's perspective and a kind of sympathy too, they depict their appreciation and amazement to their animal personas couple of times. Does this

mean this brand-new hybrid perspective that Semi, Miranda, and Arnie gain through their animal selves help readers create a sort of sympathy as they now *see* the world from their eyes? Stated differently, their viewpoint is significant because it offers readers an animal's perspective that also possesses human consciousness, allowing them to both experience humanity and animality at the same time.

Such an insatiable desire to create/become something more than human, which transcends the human limit both physically and cognitively, finds its effective examples in *The Island of Dr. Moreau* and *Dr. Franklin's Island*, and it mirrors the everlasting human aspiration to reach a level beyond the average. This insistent quest paradoxically results in the devaluation of animal lives as well as the human in the face of scientific or biological advancements. Carol Adams, in *Pornography of Meat*, discusses that it is the matter of power that is determinant factor in the relationship of the human with the rest of nature. Adams states that the "pleasurable consumption of consumable beings is the dominant perspective of our culture. It is what subjects do to objects, what someone does with something" (13). The subject human (the mad scientists in the novels) does whatever he wants to the object animal (both animal and human in Dr. Franklin's case). In this case, human relationship with animals and the rest of nature was, is, and will be inevitably anthropocentric. But in the process of interfering with the natural way of existence in general, humans find themselves inadvertently swinging between the posthuman potentials of their experiments. Hence, these narratives epitomize the radical ascent and shift of anthropocentrism, and they ironically represent some posthuman possibilities, ruptured from the problematic nature of the human, that is, a species stranded between divinity and animality.

A shift in perspective may be necessary to recognize the intricate interdependence among all living things in nature and to acknowledge that, despite our varied physical and cognitive abilities, we are all but a small part of the larger ecosystem. This is true even though humanity's relationship with nonhuman nature seems inherently anthropocentric. Human beings might not comprehend all beings' contribution to the system fully, but we need to recognize that each being has a purpose in this life circle. In other words, human-centeredness should be replaced with eco-centeredness, which prioritizes the intrinsic value of not only the human but also all fauna and flora. At this very point, I should again

highlight the terms humanimality and posthuman, and what lies in their conceptualizations of human and animal. Humanimality, which "involves deconstructing not only the human/animal binary but also related binaries of nature/culture and similarity/diversity to unify these dualistic concepts in strategic ways" (Freeman 12), favors a state of mind and being that does not consider the human as an entirely privileged and independent species from animality. Posthuman, on the other hand, as Rosi Braidotti describes the term, is a "convergence phenomenon between post-humanism and post-anthropocentrism, that is to say, the critique of the universal ideal of the Man of reason on the one hand and the reject of species supremacy on the other" ("Preface: The Posthuman" xi), and it revisits the conventionally accepted definitions of human, and the suggested exceptionalism should be deconstructed. Thus, posthuman starts where the human is deconstructed. In this regard, both humanimality, which underlines the animality of human, and the posthuman, which points outs a mode of perception where there is no set speciesism and anthropocentric utilizations of non-human world, suggest a way of living in nature, among other members of the ecosystem without causing any harm to them.

However, neither of the novels analyzed in this thesis depict mad scientist characters who can be classified as humanimals or posthumans—individuals who have reached a point where they perceive themselves as equal, rather than superior, to the non-human world. Quite the opposite, the representations of the mad scientists in both novels continue their anthropocentric experimentations on animals. Though *Dr. Franklin's Island* provides a mad scientist who epitomizes a radically altered anthropocentrism in which humans are exploited like animals, this does not mean that he has reached a posthuman state. Still, both scientists end up creating living trans-species, that is, human animal hybrids, who cannot be considered solely as human or animal. *In The Island of Dr. Moreau*, for example, the narrator Prendick becomes a posthuman —or a humanimal— having spent a considerable time on the island with the re-animalized Beast Folk. At the end of the narrative, his state of mind has changed to an animality where he does not feel like he belongs to the human society or the city anymore. In *Dr. Franklin's Island*, anthropocentric mad scientist's transgenic experiments pave the way for teenagers who indeed enjoy their animal selves where they do not have to worry about clothes, weight, and a state in which no glasses are required. Both novels, therefore, successfully

alter the conventional modes of being, perceiving, and behaving, yet the mad scientists cannot free themselves from the complex web of anthropocentrism and one way or another, they continue to serve anthropocentrism and speciesism. While the mad scientists are still anthropocentric and speciesist, the end results of their experimentations —it is important to involve Prendick too here in the discussion— point to a state where they enjoy not being human as we perceive it, rather, it seems that they find peace in animality.

All in all, in *The Island of Dr. Moreau*, the Beast Folk resurface the repressed animality; Prendick finds himself surrounded with animality, and adopts mannerisms, forgetting about the constructed animality. In *Dr. Franklin's Island* Semi and Miranda favor their animal selves where no humanly requirements like clothing is needed. In one way or another, all of these characters find themselves embracing their animalistic instinct rather than holding onto their humanity. These hybrids, therefore, by indulging in animality, challenge readers to revisit their thoughts about what it means to be an animal or a human. Thus, both novels provide different examples of transgressing the human and animal borderline, providing valuable examples of posthuman hybridity in their own ways.

BIBLIOGRAPHY

"About Us." *Nonhuman Rights Project*. Web. 1 Aug. 2023.

Adams, Carol. *Neither Animal Nor Beast: Feminism and the Defense of Animals*. New York: Continuum, 1994. Web. 3 Apr. 2023.

---. *Pornography of Meat*. New York: Continuum, 2003. Web. 3 Apr. 2023.

Agamben, Giorgio. *The Open*. Translated by Kevin Attell. Stanford: Stanford University Press, 2004. Web. 14 May 2023.

Ağın, Başak. *Posthümanizm*. Ankara: Siyasal Kitabevi, 2020. Print.

Alaimo, Stacy. *Bodily Natures: Science, Environment, and the Material Self*. Bloomington: Indiana University Press, 2010. Web. 11 Sept. 2023.

Aschheim, Kathryn, and Laura DeFrancesco. "Xenotransplantation: how close are we?" *Nature Biotechnology* 41 (2023): 452–460.

Badmington, Neil. "Introduction." Ed. Neil Badmington. *Posthumanism*. London: Red Globe Press, 2000. Web. 21 Oct. 2023.

Barad, Karen. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham: Duke University Press, 2007. Web. 27 Jan. 2024.

---. "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter." *Signs* 28.3 (2003): 801–831.

Bentham, Jeremy. *An Introduction to the Principles of Morals and Legislation*. Kitchener: Batoche Books, 2000. Web. 7 Apr. 2023.

Block, Ed Jr. "James Sully, Evolutionist Psychology and the Late Victorian Gothic Fiction." *Victorian Studies* 25.4 (1982): 443–467.

Boddice, Rob. "The End of Anthropocentrism." Introduction. Ed. Rob Boddice. *Anthropocentrism: Humans, Animals, Environments*. Boston: Brill, 2011. Web. 10 March 2023.

Bonnicksen, Andrea L. *Chimeras, Hybrids, and Interspecies Research: Politics and Policymaking*. Washington D.C.: Georgetown University Press, 2009. Web. 26 March 2023.

Bradshaw, G.A., and Mary Watkins. “Trans-species Psychology: Theory and Praxis.” *Psyche & Nature* 75 (2006): 69–94.

Bradshaw, Gay. “Trans-species Living: An Interview with Gay Bradshaw.” *Animal Visions* 17 Sep. 2010. Web. 29 Jan. 2024.

Braidotti, Rosi. “Preface: The Posthuman Exuberant Excess.” *Philosophical Posthumanism*. London: Bloomsbury Academic, 2019. Web. 10 Nov. 2022.

---. *The Posthuman*. Cambridge: Polity Pres, 2013. Web. 25 May 2023.

Broglio, Ron. “Romantic.” *The Cambridge Companion to Literature and the Posthuman*. Eds. Bruce Clarke and Manuela Rossini. Cambridge: Cambridge University Press, 2017. Web. 24 Feb. 2023.

Callicott, J. Baird. “Non-Anthropocentric Value Theory and Environmental Ethics.” *American Philosophical Quarterly* 21.4 (1984): 299–309. Web.

Carver, Stephan. “‘Are we not Men?’ Evolution and Degeneration on *The Island of Dr. Moreau*.” *Wordsworth Editions Blog*. 23 Sept. 2021.

Cavalieri, Paolo. “Speciesism.” *Encyclopedia of Animal Rights and Animal Welfare*. Ed. Marc Bekoff. Second Edition. Santa Barbara: Greenwood Press, 2010. Web. 23 May. 2024.

Chang, Annie C. Y., and Stanley N. Cohen. “Genome Construction Between Bacterial Species In Vitro: Replication and Expression of Staphylococcus Plasmid Genes in Escherichia coli.” *PNAS* 71.4 (1974): 1030–1034.

Christensen, Timothy. “The ‘Bestial Mark’ of Race in *The Island of Dr. Moreau*.” *Criticism* 46.4 (2004): 575–595. Web.

Coleman, Vera. “Becoming a Fish: Trans-Species Beings in Narrative Fiction of the Southern Core.” *Interdisciplinary Studies in Literature and Environment* 23.4 (2016): 694–710.

Colling, Sarat. “Animal Agency, Resistance, and Escape.” *Critical Animal Studies: Towards Trans-species Social Justice*. Eds. Atsuko Matsuoka and John Sorenson. London: Rowman & Littlefield International Ltd, 2018. Web. 20 July 2023.

Connor, Steve. “Scientists Create a Cow-Human Hybrid.” *Independent*. 13 Nov. 1998. Web. 9 July 2023.

Darwin, Charles. *The Expression of the Emotions in Man and Animals*. Chicago: University of Chicago Press, 1965. Web. 23 Dec. 2023.

---. *The Origin of Species*. London: ElecBook, 1997. 24 Dec. 2023.

DeLapp, Kevin. “The View from Somewhere: Anthropocentrism in Metaethics.” *Anthropocentrism: Humans, Animals, Environments*. Ed. Rob Boddice. Boston: Brill, 2011. Web. 3 Feb. 2023.

Deleuze, Gilles, and Felix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press, 1987. Web. 3 Feb. 2023.

Derrida, Jacques. *Of Grammatology*. Translated by Gayatri Chakravorty Spivak. Baltimore: The John Hopkins University Press, 1977. Web. 20 June 2023.

---. *The Animal That Therefore I am*. Translated by David Wills. New York: Fordham University Press, 2008. Print.

Desblache, Lucile. “Guest Editor’s Introduction: Hybridity, Monstrosity and the Posthuman in Philosophy and Literature Today.” *Comparative Critical Studies* 9.3 (2012): 245–255.

Ely. John J., et al. “Technical Note: Chromosomal and mtDNA Analysis of Oliver.” *American Journal of Physical Anthropology* 105. (1998): 395–403.

Estok, Simon. *The Ecophobia Hypothesis*. New York: Routledge, 2018. Web. 14 Jan. 2024.

Facchini, Fiorenzo. *A Day With Homo Sapiens: Life 15,000 Years Ago*. Connecticut: Twenty-First Century Books, 2003. Web. 5 Nov. 2022.

Farris, Anelise. “‘What on earth was he — man or animal?’: Posthuman Permeability in H.G. Wells’s *The Island of Dr. Moreau*.” *Canadian Journal of Disability Studies* 9.2 (2020): 138–156. Web.

Felton, James. “The Russian Scientist Who Tried To Create A Human-Chimp Hybrid.” *IFL Science*. LabX Media Group. 2 March 2021. Web. 9 July 2023.

Ferrando, Francesca. *Philosophical Posthumanism*. London: Bloomsbury Academic, 2019. Web. 10 Nov. 2022.

---. “Posthuman Healing and Revealing.” Afterword. *Posthuman Pathogenesis: Contagion in Literature, art, and Media*. 247–250. Eds. Başak Ağın and Şafak Horzum. New York: Routledge, 2023. Web. 22 Nov. 2022.

Foucault, Michel. *The Order of Things: An Archaeology of the Human Sciences*. New York: Pantheon, 1971. Web. 11 Nov. 2022.

Franklin, Adrian. “Posthumanism.” Ed. George Ritzer. *The Blackwell Encyclopedia of Sociology*. Malden: Blackwell, 2007. Web. 15 Nov. 2022.

Freedgood, Elaine. *The Ideas in Things: Fugitive Meaning in the Victorian Novel*. Chicago: University of Chicago Press, 2006. Web. 17 Nov. 2022.

Freeman, C. P. "Embracing Humanimality: Deconstructing the Human/Animal Dichotomy." *Arguments about Animal Ethics*. Eds. G. Goodale & J. E. Black. Georgia: Georgia State University Press, 2010. 11–30. Web. 29 Nov. 2022.

Freud, Sigmund. "The Uncanny." Translated by Alix Strachey. *Imago* (2019): 1–21.

Gordon, Joan. "Animal Studies." *Routledge Companion to Science Fiction*. Eds. Mark Bould, Andrew M. Butler, Adam Roberts, and Sherryl Vint. New York: Routledge, 2009. 331–341. Web. 19 Jan. 2023.

Grimm, David. "A Mouse for every Gene." *Science* 312 (2006): 1862-1866.

Halam, Ann. *Dr. Franklin's Island*. New York: Wendy Lamb Books, 2002. Print.

Halberstam, Judith, and Ira Livingston. "Introduction: Posthuman Bodies". *Posthuman Bodies*. Eds. Judith Halberstam and Ira Livingston. Bloomington: Indiana University Press, 1995. 1–19. Web. 18 Nov. 2022.

Harari, Yuval Noah. *Sapiens: A Brief History of Humankind*. New York: Signal Books, 2014. Web. 1 Nov. 2022.

Haraway, Donna. *Modest_Witness@Second_Millennium.Femaleman*. New York: Routledge. 2018. Web. 28 Nov. 2022.

---. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Chicago: Prickly Paradigm Press, 2003. Web. 28 Nov. 2022.

Hassan, Ihab. "Prometheus as Performer: Toward a Posthumanist Culture?" *Georgia View* 31.4 (1977): 830–850.

Heidegger, Martin. *The Fundamental Concepts of Metaphysics: World, Finitude, Solitude*. Translated by William McNeill and Nicholas Walker. Bloomington: Indiana University Press, 1995. Web. 18 July 2023.

Herbrechter, Stefan. *Posthumanism: A Critical Analysis*. London: A&C Black, 2013. Web. 8 May 2023.

Hix, Harvey L. "Hybridity is the New Metamorphosis." *Comparative Critical Studies* 9.3 (2012): 271–283.

Hornsby, Asha. "The Pen and the Scalpel: Literature and Vivisection, 1875–1912." Diss. University College London, 2020. Web. 22 Dec. 2022.

Horta, Oscar, and Frauke Albersmeier. "Defining Speciesism." *Philosophy Compass* 15.11 (2020): 1–9. Web.

Horta, Oscar. “What is Speciesism?.” *Journal of Agricultural and Environmental Ethics* 23.3 (2010): 243–266. Web.

Hribal, Jason C. “Animals, Agency, and Class: Writing the History of Animals from Below.” *Human Ecology Review* 14.1 (2007): 101–112. Web.

Hurley, Kelly. *The Gothic Body: Sexuality, Materialism, and Degeneration at the Fin De Siècle*. Cambridge: Cambridge University Press, 1996. Web. 2 Jan. 2023.

Huxley, Thomas. *Evolution and Ethics*. New York: Prometheus Books, 2004. Web. 6 Feb. 2024.

Kappeler, Susanne. *The Pornography of Representation*. Minneapolis: The University of Minnesota Press, 1986. Web. 4 Jan. 2024.

Karpouzou, Peggy. *War on the Human: New Responses to an Ever-Present Debate*. Newcastle: Cambridge Scholars Publishing, 2017. Web. 7 July 2023.

Kernohan, Andrew. *Environmental Ethics: An Interactive Introduction*. Ontario: Broadview Press, 2012. 22 July 2023. Web.

Latour, Bruno. *We Have Never Been Modern*. Trans. Catherine, Porter. Massachusetts: Harvard University Press, 1993. Web. 9 June 2023.

Leopold, Aldo. *A Sand County Almanac and Sketches Here and There*. New York: Oxford University Press, 1949. Web. 2 Nov. 2022.

“Lessons from the Human Genome Project.” *YouTube*. Uploaded by National Human Genome Research Institute, 5 April, 2018. Web. 22 July 2023.

Marino, Lori. “A Trans-Species Perspective on Nature.” *On the Human: A Project of the National Humanities Center*. 27 Nov, 2010. Web. 28 Apr. 2023.

---. “What is Critical Animal Studies?.” *Animals and Social Work*. June 2019. Web. 8 June 2023.

Miah, Andy. “A Critical History of Posthumanism.” *Medical Enhancements & Posthumanity*. Eds. Bert Gordijn and Ruth Chadwick. New York: Routledge, 2007. Web. 13 Sept. 2023.

Miller, Eleanor M., and Frank. Varney. “Review of *Modest Witness@Second_Millennium.Femaleman copyright_Meets_Oncomouse*, by Donna Haraway.” *Gender and Society* 13.3 (1999): 412–414.

Milligan, Tony. “Speciesism as a Variety of Anthropocentrism.” *Anthropocentrism: Humans, Animals, Environments*. Ed. Rob Boddice. Boston: Brill, 2011. Web. 5 Nov. 2022.

Moore, Bryan L. "'Evidences of Decadent Humanity': Antianthropocentrism in Early Science Fiction." *Nature and Culture* 9.1 (2014): 45–65.

Morris, Desmond. *The Naked Ape: The Controversial Classic of Man's Origins*. New York: A Delta Book, 1967. Web. 29 Oct. 2022.

Morton, Timothy. "Deconstruction and/as Ecology." *The Oxford Handbook of Ecocriticism*. ed. Greg Garrard. Oxford: Oxford University Press, 2014. Web. 1 Dec. 2023.

---. "Ecology as Text, Text as Ecology." *Oxford Literary Review* 32.1 (2010): 1–17.

Mylius, Ben. "Three Types of Anthropocentrism." *Environmental Philosophy* 15.2 (2018): 159–194.

Nayar, Pramod K. *Posthumanism*. Cambridge: Polity Press, 2014. Web. 19 Nov. 2022.

---. "Posthumanism in the Year of COVID- 19." Foreword. *Posthuman Pathogenesis: Contagion in Literature, art, and Media*. Ed. Başak Ağın and Şafak Horzum. xiv–xvii. New York: Routledge, 2023. Web. 20 Nov. 2022.

Nee, Sean. "The Great Chain of Being." *NATURE* 435.26 (2005): 429. Web.

Nisbet, John Ferguson. *The Insanity of Genius and the General Inequality of Human Faculty*. London: Ward and Downey, 1891. Web. 6 Feb. 2024.

Norris, Margot. *Beasts of the Modern Imagination: Darwin, Nietzsche, Kafka, Ernst, and Lawrence*. Baltimore: John Hopkins University Press, 1985. Web. 29 May 2023.

Noske, Barbara. *Beyond Boundaries: Humans and Animals*. Montreal: Black Rose Books, 1997. Web. 9 Dec. 2022.

Oppermann, Serpil. "Material Ecocriticism and the Creativity of Storied Matter." *Frame: Journal of Literary Studies* 26.2 (2013): 55–69. Web.

Parrinder, Patrick. *Science Fiction: A Critical Guide*. London: Longman, 1979. Web. 1 Nov. 2022.

Peggs, Kay. "Transgenic Animals, Biomedical Experiments, and "Progress."" *Journal of Animal Ethics* 3.1 (2013): 41–56. Web.

Pollan, Michael. *The Omnivore's Dilemma: A Natural History of Four Meals*. New York: The Penguin Press, 2006. Web. 28 Oct. 2022.

Puleo, Alicia H. "From Cyborgs to Organic Model and Back: Old and New Paradoxes of Gender and Hybridity." *Comparative Critical Studies* 9.3 (2012): 349–364.

Randerson, James. "Richard Dawkins: How would you feel about a half-human half-chimp hybrid?" *Guardian*. 2 Jan. 2009. Web. 20 June 2023.

Ranisch, Robert and Stefan Lorenz Sorgner. "Introducing Post- and Transhumanism." eds. Robert Ranisch and S. L. Sorgner. *Beyond Humanism: Trans- and Posthumanism*. Mountain View: Peter Land Edition, 2014. Web. 9 Dec. 2022.

"Rhizome." Cambridge Dictionary, Cambridge University Press, n.d., https://dictionary.cambridge.org/dictionary/english/rhizome#. Web. 21 Apr. 2024.

Ritvo, Harriet. *The Animal Estate, The English and Other Creatures in the Victorian Age*. Massachusetts: Harvard University Press, 1987. Web. 8 Nov. 2022.

Roberts, Adam. *Science Fiction*. London: Routledge, 2000. Web. 18 Nov. 2022.

Rosand, David. "Reading the Figure." *Notes in the History of Art* 31/32.4/1 (2012): 36–44.

Rose, Nikolas. *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century*. Princeton: Princeton University Press, 2007. Web. 27 May 2023.

Ryder, Richard. "Speciesism Again: the original leaflet." *Critical Society*. 2.

---. *Speciesism, Painism, and Happiness*. Exeter: Andrews UK Limited, 2017. Web. 4 May 2023.

---. *Victims of Science: The Use of Animals in Research*. London: Open Gate Press, 1983. Web. 3 May 2023.

Savić, Nataša, and Gerald Schwank. "Advances in therapeutic CRISPR/Cas9 genome editing." *Translational Research* 168 (2016): 15–21.

Sax, Boria. "What is this Quintessence of Dust? The Concept of the 'Human' and its Origins." *Anthropocentrism: Humans, Animals, Environments*. Ed. Rob Boddice. Boston: Brill, 2011. Web. 5 Feb. 2023.

Singer, Peter. *Animal Liberation*. New York: HarperCollins Publishers, 2002. 28 Feb. 2023.

Stanescu, Vasile. "Defining Critical Animal Studies." *YouTube*, uploaded by Animals & Society Institute, 21 Oct. 2019. Web. 9 July 2023.

Stiles, Anne. "Literature in "Mind": H.G. Wells and the Evolution of the Mad Scientist." *Journal of the History of Ideas* 70.2 (2009): 317–339.

Suarez, Antoine, and Joachim Huarte. Eds. *Is this Cell a Human Being? Exploring the Status of Embryos, Stem cells and Human-Animal Hybrids*. Berlin: Springer, 2011. Web. 8 March 2023.

Taylor, Jesse Oak. "Where is Victorian Ecocriticism?." *Victorian Literature and Culture*, 43.4 (2015): 877–894.

"The Human Genome Project." *National Human Genome Research Institute*. Web. 22 July 2023.

Torres, Bob. *Making A Killing: The Political Economy of Animal Rights*. Oakland: AK Press, 2007.

Valderrama, Patricia. *Reading for the Anthropocene: Humanimality as Resilience*. Diss. Stanford University, 2018.Stanford: Stanford U. Press, 2018.

Vint, Sherryl. *Animal Alterity: Science Fiction and the Question of the Animal*. Liverpool: Liverpool University Press, 2010.

---. "Animals and Animality from the *Island of Dr. Moreau* to *the Uplift Universe*." *The Yearbook of English Studies*. 37.2 (2007): 85–102.

---. ""The Animals in That Country": Science Fiction and Animal Studies." *Science Fiction Studies*. 35.2 (2008): 177–188.

Weitzenfeld, Adam, and Melanie Joy. "An Overview of Anthropocentrism, Humanism, and Speciesism in Critical Animal Theory." *Counterpoints*. 448 (2014): 3–27.

Wells, H.G. *The Island of Dr. Moreau*. London: HarperCollins Publishers, 2017. Print.

Wolfe, Cary. "In the Shadow of Wittgenstein's Lion: Language, Ethics, and the Question of the Animal." *Zoontologies: The Question of the Animal*. Ed. Cary Wolfe. 1–58. Minneapolis: University of Minnesota Press, 2003.

---. *What is Posthumanism?*. Minnesota: University of Minnesota Press, 2010.

Yampell, Cat. "When Science Blurs the Boundaries: The Commodification of the Animal in Young Adult Science Fiction." *Science Fiction Studies*. 35.2 (2008): 207–222.