

Hacettepe University Graduate School of Social Sciences English Language and Litetature British Cultural Studies

THE CONCEPT OF HUMAN AND MONSTER IN MARY SHELLEY'S FRANKENSTEIN AND ROBERT LOUIS STEVENSON'S THE STRANGE CASE OF DR. JEKYLL AND MR. HYDE

Esra ERDEM

Master's Thesis

Ankara, 2019

THE CONCEPT OF HUMAN AND MONSTER IN MARY SHELLEY'S FRANKENSTEIN AND ROBERT LOUIS STEVENSON'S THE STRANGE CASE OF DR. JEKYLL AND MR. HYDE

Esra ERDEM

Hacettepe University Graduate School of Social Sciences

English Language and Litetature

British Cultural Studies

Master's Thesis

Ankara, 2019

KABUL VE ONAY

Esra Erdem tarafından hazırlanan "The Concept of Human and Monster in Mary Shelley's *Frankenstein* and Robert Louis Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde*" başlıklı bu çalışma, 20 Haziran 2019 tarihinde yapılan savunma sınavı sonucunda başarılı bulunarak jürimiz tarafından Yüksek Lisans Tezi olarak kabul edilmiştir.

Prof. Dr. Aytül ÖZÜM (Başkan)

Dr. Öğretim Üyesi Alev KARADUMAN (Danışman)

Dr. Öğretim Üyesi Pınar TAŞDELEN

Dr. Öğretim Üyesi Aslı DEĞİRMENCİ

Dr. Öğretim Üyesi Defne TUTAN

Yukarıdaki imzaların adı geçen öğretim üyelerine ait olduğunu onaylarım.

Prof. Dr. Musa Yaşar SAĞLAM

Enstitü

YAYIMLAMA VE FİKRİ MÜLKİYET HAKLARI BEYANI

Enstitü tarafından onaylanan lisansüstü tezimin tamamını veya herhangi bir kısmını, basılı (kağıt) ve elektronik formatta arşivleme ve aşağıda verilen koşullarla kullanıma açma iznini Hacettepe Üniversitesine verdiğimi bildiririm. Bu izinle Üniversiteye verilen kullanım hakları dışındaki tüm fikri mülkiyet haklarım bende kalacak, tezimin tamamının ya da bir bölümünün gelecekteki çalışmalarda (makale, kitap, lisans ve patent vb.) kullanım hakları bana ait olacaktır.

Tezin kendi orijinal çalışmam olduğunu, başkalarının haklarını ihlal etmediğimi ve tezimin tek yetkili sahibi olduğumu beyan ve taahhüt ederim. Tezimde yer alan telif hakkı bulunan ve sahiplerinden yazılı izin alınarak kullanılması zorunlu metinleri yazılı izin alınarak kullandığımı ve istenildiğinde suretlerini Üniversiteye teslim etmeyi taahhüt ederim.

Yükseköğretim Kurulu tarafından yayınlanan "Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge" kapsamında tezim aşağıda belirtilen koşullar haricince YÖK Ulusal Tez Merkezi / H.Ü. Kütüphaneleri Açık Erişim Sisteminde erişime açılır.

- Enstitü / Fakülte yönetim kurulu kararı ile tezimin erişime açılması mezuniyet tarihimden itibaren 2 yıl ertelenmiştir.
- Enstitü / Fakülte yönetim kurulunun gerekçeli kararı ile tezimin erişime açılması mezuniyet tarihimden itibaren ay ertelenmiştir. (2)
- o Tezimle ilgili gizlilik kararı verilmiştir. (3)

/

l "Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge"

- (1) Madde 6. 1. Lisansüstü tezle ilgili patent başvurusu yapılması veya patent alma sürecinin devam etmesi durumunda, tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulu iki yıl süre ile tezin erişime açılmasının ertelenmesine karar verebilir.
- (2) Madde 6. 2. Yeni teknik, materyal ve metotların kullanıldığı, henüz makaleye dönüşmemiş veya patent gibi yöntemlerle korunmamış ve internetten paylaşılması durumunda 3. şahıslara veya kurumlara haksız kazanç imkanı oluşturabilecek bilgi ve bulguları içeren tezler hakkında tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulunun gerekçeli kararı ile altı ayı aşmamak üzere tezin erişime açılması engellenebilir.
- (3) Madde 7. 1. Ulusal çıkarları veya güvenliği ilgilendiren, emniyet, istihbarat, savunma ve güvenlik, sağlık vb. konulara ilişkin lisansüstü tezlerle ilgili gizlilik kararı, tezin yapıldığı kurum tarafından verilir *. Kurum ve kuruluşlarla yapılan işbirliği protokolü çerçevesinde hazırlanan lisansüstü tezlere ilişkin gizlilik kararı ise, ilgili kurum ve kuruluşun önerisi ile enstitü veya fakültenin uygun görüşü üzerine üniversite yönetim kurulu tarafından verilir. Gizlilik kararı verilen tezler Yükseköğretim Kuruluna bildirilir.

Madde 7.2. Gizlilik kararı verilen tezler gizlilik süresince enstitü veya fakülte tarafından gizlilik kuralları çerçevesinde muhafaza edilir, gizlilik kararının kaldırılması halinde Tez Otomasyon Sistemine yüklenir.

* Tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulu tarafından karar verilir.

ETİK BEYAN

Bu çalışmadaki bütün bilgi ve belgeleri akademik kurallar çerçevesinde elde ettiğimi, görsel, işitsel ve yazılı tüm bilgi ve sonuçları bilimsel ahlak kurallarına uygun olarak sunduğumu, kullandığım verilerde herhangi bir tahrifat yapmadığımı, yararlandığım kaynaklara bilimsel normlara uygun olarak atıfta bulunduğumu, tezimin kaynak gösterilen durumlar dışında özgün olduğunu, **Dr. Öğretim Üyesi Alev KARADUMAN** danışmanlığında tarafımdan üretildiğini ve Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Tez Yazım Yönergesine göre yazıldığını beyan ederim.

Esra ERDEM

ACKNOWLEDGEMENTS

Completing this thesis would not be possible without the contribution, assistance and support of many people. Firstly I would like to thank my supervisor Asst. Prof. Dr. Alev KARADUMAN for her endless support and dedication throughout the whole period. I am very grateful to her for all the revisions and ideas she has made on my thesis. Without her academic guidance and emotional support, it would be impossible to complete this thesis.

I wish to express my gratitude to my thesis jury, Prof. Dr. Aytül ÖZÜM, Asst. Prof. Dr. Defne TUTAN, Asst. Prof. Dr. Pınar TAŞDELEN, and Asst. Prof. Dr. Aslı DEĞİRMENCİ for their valuable comments, suggestions, and support.

Also I would like to acknowledge my friends Gizem AKKURT, Mert MUTLUSOY, Merve SANEMTASI, Tuğçe SOYGUL and Gürcan ARICI for their motivations and trust on me. You supported me greatly and were always willing to help me whenever I needed. I would like to thank you all for your excellent cooperation and for your efforts to keep my head out of my research when I get tired. I would also like to thank my fluffy cats Alya and Afra for making me smile everytime during the whole process.

My most special thanks are to my dear family for always supporting me and believing me and also for their wise counsel and sympathetic ear. I specially want to thank my beloved brother Ümit Yusuf ERDEM for always motivating me and encouraging me during the whole process.

ABSTRACT

ERDEM, Esra. The Concept of Human and Monster in Mary Shelley's *Frankenstein* and Robert Louis Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde*. Master's Thesis, Ankara, 2019.

Human, as a concept, has always been at the center of the philosophical and artistic concerns in history. With the scientific developments achieved in the nineteenth century, new perspectives regarding the concept emerge by challenging the conventionally accepted anthropocentric view. Among the developments that prompt this perception, galvanism, dissection and the theory of evolution take a significant place. Although these nineteenth-century practices reject human centrality in understanding this relationship with other species, this anti-anthropocentric approach points at a relatively new theoretical frame: the theory of posthumanism. Principally the theory focuses on going beyond human by reinforcing a multispecies existence. The traces of posthumanism in these scientific practices are observed in the literary works of the nineteenth century period, as many English writers of the period explore the issue of human by reflecting the main ideas of this theory in their works.

In addition to having features compatible with the idea of posthumanism, the nineteenth-century scientific developments also shed light on the concept of monstrosity in these literary works. In some of these works, it is observed that Darwin's theory of evolution contributed to the formation of degeneration theory and consequently to the emergence of degenerate characters in literature. On the other hand, galvanism and dissection practices inspire the idea of creating a new species with human and animal body parts. In literary narratives, these degenerate beings and the new species created by the combination of different human and animal bodies, meet at the common point by projecting the theme of monstrosity. In this vein, Mary Shelley's *Frankenstein* (1831) and Robert Louis Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde* (1886) serve as models to display this shared point. Therefore, this study aims to examine these novels by focusing on nineteenth-century scientific issues such as galvanism, dissection and theory of evolution and how these issues come together with the theme of monstrosity and the theory of posthumanism.

Keywords: Mary Shelley, *Frankenstein*, Robert Louis Stevenson, *The Strange Case of Dr. Jekyll and Mr. Hyde*, posthumanism, transhumanism, monstrosity, degeneration, galvanism, dissection

ÖZET

ERDEM Esra. Mary Shelley'nin *Frankenstein* ve Robert Louis Stevenson'un *Dr. Jekyll ve Mr. Hyde'ın Tuhaf Hikayesi* Romanlarındaki İnsan ve Canavar Kavramı. Yüksek Lisans Tezi, Ankara, 2019.

Bir kavram olarak, insan, tarihte her zaman felsefi ve sanatsal kaygıların merkezinde olmuştur. On dokuzuncu yüzyılda ulaşılan bilimsel gelişmelerle birlikte, kavrama ilişkin geleneksel olarak kabul edilen insan merkezli görüşe meydan okuyan yeni bakış açıları ortaya çıkmaktadır. Bu algıya sebep olan gelişmeler arasında galvanizm, diseksiyon ve evrim teorisi önemli yer tutmaktadır. Bahsi geçen on dokuzuncu yüzyıl uygulamaları, insanın diğer türlerle olan ilişkisini anlamada insan merkezliliğini reddederken, bu insanmerkezcilik karşıtı yaklaşım görece olarak yeni bir kuramsal çerçeveye, posthumanizm kuramına işaret etmektedir. Prensip olarak bu kuram çok türcü bir varlığı destekleyerek insanın ötesine ulaşmaya odaklanır. Bu bilimsel uygulamalardaki posthumanizm izleri on dokuzuncu yüzyılın edebi eserlerinde görülmektedir, çünkü dönemin pek çok İngiliz yazarı, eserlerinde insan konusunu bu kuramın temel fikirleri ışığında ele alır.

On dokuzuncu yüzyıldaki bilimsel gelişmeler, posthumanizm fikri ile bağdaşan özelliklere sahip olmasının yanı sıra, aynı zamanda bu edebi eserlerdeki canavarlık kavramına da ışık tutmaktadır. Bu çalışmaların bazılarında Darwin'in evrim kuramının dejenerasyon kuramının oluşumuna ve sonuç olarak edebiyatta dejenere/bozulmuş karakterlerin ortaya çıkmasına katkıda bulunduğu görülmektedir. Öte yandan, galvanizm ve diseksiyon uygulamaları ise insan ve hayvan vücudu parçalarıyla yeni bir tür yaratma fikrine ilham verir. Edebi yazınlarda, bu dejenere/bozulmuş varlıklar ve farklı insan ve hayvan bedenlerinin birleşimi tarafından yaratılan yeni türler, canavarlık temasını yansıtarak ortak noktada buluşurlar. Bu anlamda, Mary Shelley'nin Frankenstein (1831) ve Robert Louis Stevenson'un Dr. Jekyll ve Mr. Hyde'ın Tuhaf Hikayesi (1886) romanları, bu ortak noktayı göstermek adına örnek teşkil etmektedir. Bu nedenle, bu çalışma galvanizm, diseksiyon ve evrim kuramı gibi on dokuzuncu yüzyıl bilimsel konularına ve bu konuların canavarlık teması ve posthumanizm kuramı ile nasıl bir araya geldiğine odaklanarak bu romanları incelemeyi amaçlamaktadır.

Anahtar Sözcükler: Mary Shelley, *Frankenstein*, Robert Louis Stevenson, *Dr. Jekyll and Mr. Hyde'ın Tuhaf Hikayesi*, posthümanizm, transhümanizm, canavarlık. dejenerasyon/bozulma, galvanizm, diseksiyon

TABLE OF CONTENTS

ACCEPTANCE AND APPROVALi
YAYIMLAMA VE FİKRİ MÜLKİYET HAKLARI BEYANIii
ETİK BEYANiii
ACKNOWLEDGEMENTSiv
ABSTRACTv
TURKISH ABSTRACTvii
TABLE OF CONTENTSix
INTRODUCTION1
CHAPTER I: A POSTHUMANIST SCIENTIST AND A POSTHUMAN MONSTER: MARY SHELLEY'S <i>FRANKENSTEIN</i>
CHAPTER II: A DEGENERATE MONSTER AND A POSTHUMAN SCIENTIST IN VICTORIAN SOCIETY: ROBERT LOUIS STEVENSON'S THE STRANGE CASE OF DR. JEKYLL AND MR. HYDE
CONCLUSION94
WORKS CITED101
APPENDIX 1. ORIGINALITY REPORT114
APPENDIX 2. ETHICS BOARD WAIVER FORM116

INTRODUCTION1

None of the traits by which the most authorized philosophy or culture has thought it possible to recognize this 'proper of man' — none of them is, in all rigor, the exclusive reserve of what we humans call human. Either because some animals also possess such traits, or because man does not possess it as surely as is claimed.

--Derrida and Roudinesco For What Tomorrow: A Dialogue

Mary Shelley's (1797-1851), Frankenstein or the Modern Prometheus (1831) and Robert Louis Stevenson's The Strange Case of Dr. Jekyll and Mr. Hyde (1886)² are the primary examples of the nineteenth-century science fiction and gothic novels. In The Strange Case, the scientific process encompasses the entire plot since Dr. Jekyll makes use of medicine to transform into Mr. Hyde throughout the whole novel. In this context, undergoing a change via scientific interventions prompts certain questions about the definition of "human" and its relationship with science. Since the transformation from Jekyll to Hyde takes place in the form of returning to the progenitors in the evolutionary sense, the theory of evolution, which is one of the greatest scientific developments of the period, plays a significant role in understanding the human concept in the novel. On the other hand, Mary Shelley's, Frankenstein is widely examined within the scope of multidimentional aspects. However, the scientific practices used in the novel are significant in terms of their contribution to the definition of human as these enable the protagonist of the novel to create a new species out of these.

¹ Since the nineteenth-century sciences and theories are explored within the analysis of the fictional works in this thesis, the simple past tense is preferred to explain the nineteenth-century scientific context and theories, and present tense is preferred to evaluate the fictional works within these theories.

² The names of the novels are given in abbreviated form throughout the thesis. The original name of Shelley's novel is *Frankenstein or the Modern Prometheus*. However, in this thesis the novel is referred as *Frankenstein* and the full name of Stevenson's novel, which is *The Strange Case of Dr. Jekyll and Mr. Hyde*, is referred as *The Strange Case*.

In these novels, there exits a concern of surpassing the limits of human and bringing a new discourse to the human concept, namely an attempt of an "integral redefinition of the notion of the human", which is analysed within the framework of posthumanism theory (Ferrando 26). In addition to the idea of bringing a new discourse to the human concept, posthumanism theory also reinforces an anti-anthropocentric approach to the human concept (Wolfe, What is xv) and the traces of such an approach are observed in the protagonists of these novels. However, aside from this approach, the aim of achieving a better human state through scientific and technological applications is also observed in these characters. This aim projects the transhumanism movement which is generally evaluated under the posthumanism theory. According to many scholars, transhumanism in essence is derived from the pursuit of transforming into a better version of man and it is thought that it is influenced by Darwin's theory of evolution (Bardziński 105). While Darwin's theory is associated with advancement and development within the concept of transhumanism, it is also related to the idea of evolutionary decline, and its reflections are represented in Stevenson's The Strange Case.

In the literary works studied within this thesis, many of the characteristics of the protagonists remark the motivations of both transhumanism and posthumanism as they both intend to surpass the limits of human and change the definition of it. Moreover, the scientific developments of the periods in which these works are written enable them to be examined within posthumanist and transhumanist contexts. While Victor's creation of a new species with this motivation is evaluated within the scope of posthumanism theory, Dr. Jekyll's newly created self is an outcome of transhumanist ideas. The distorted bodies created as a result of these ideals are monstrous in both novels, though the reasons for these distortions diverge. While in *Frankenstein*, the posthuman body is monstrous, in *The Strange Case*, the degenerate body becomes the monster. Thus, the new entities created with the ideals of posthumanism and transhumanism emerge as monstrous beings as represented in these texts. Therefore, the major aim of this thesis is to examine these novels in relation to the posthumanism theory, transhumanism movement and the theme of monstrosity within the scientific contexts of the novels to clarify the concepts of human and monster. In order to comprehend the texts adequately,

it is necessary to explain the aforementioned theories and their relationship with the scientific contexts of the periods. Thus, in this chapter, firstly the idea of human creation and going beyond human is given in historical and scientific context, then the theory of evolution and related concepts of transhumanism and posthumanism are explained.

Surpassing the limits of the human body, expanding the life span, improving the biological structure of the body and even reaching eternal life have always been major concerns of science and humanities throughout ages. Even before Christ, extending one's life span was a great pursuit though believing in the afterlife was quite common. As stated by Nick Bostrom, "[t]he boundary between mythos and science, between magic and technology, was blurry, and almost all conceivable means to the preservation of life were attempted by somebody or other" ("A History" 1). William R. Newman defines the practice of alchemy as a pursuit of imitating nature and going beyond the limits of human capacity (27). What is significant to note regarding the practice of alchemy in the medieval period is that even at the period when religion and church were extremely dominant in social life, man challenged nature by trying to re-create or imitate the offerings of the Creator. The pursuit of changing the natural substances into other materials was ungodly and sinful though it did not prevent men from following this ungodly path. This pursuit of changing substances evolved into the dream of creating man through alchemy, which is called 'homunculus,' (Draaisma 211) and this dream became the source of fascination for humankind throughout ages. Douwe Draaisma, in his book *Metaphors of Memory* (2000) states that "the creation of artificial life has haunted the imagination like one of those projects at the limits of human ability which may perhaps one day become reality" (212).

However, the idea of creating a man through unnatural means dates to the sixteenth century and is associated with Paracelsus (1493-1541). His attempt to create a man through unnatural means is depicted in the article "Artificial Men: Alchemy, Transubstantiation, and the Homunculus" as follows:

His man-made man is formed alchemically—in a test tube—from human sperm, heated by horse dung for the forty weeks of normal human pregnancy, and "from such Artificiall men, when they come to Mans age, are made Pygmies, Gyants, and other great and monstrous men, who are the instruments of great matters," according to a seventeenth-century English translation. (M. Campbell 5)

Paracelsus's practice of creating an artificial man is a ground-breaking attempt concerning science and nature clash as it goes beyond doing experiments on non-living substances. Another significance of this experiment is that it degrades human essence into an experiential material. Moreover, human essence is fused with animal essence to create an artificial human as the materials that he uses are human sperm and horse dung. The outcome of this human-animal fusion, which challenges the idea of human superiority among other species, is expected to be a human being.

With the eighteenth-century Enlightenment thought, the intrusion of science into the human body in terms of improving the bodily means became widely accepted as the application of science and medication increased. One of the major concerns of medical science was to expand human life. In relation to this, a French philosopher and mathematician, Marquis de Condorcet (1743-1794) questioned the expandability of life as follows:

Would it be too absurd at this point to imagine that this amelioration of the human species must be regarded as susceptible of indefinite progress, that a time will come when death will be only a result of unusual accidents or the slower and slower deterioration of vital forces, and even that the average interval between birth and this deterioration will have no assignable limit? Human beings will certainly not become immortal, but can there not be an indefinite increase in the interval between the beginning of life and the average point at which existence becomes difficult for them naturally, without illness or accident? (80-81)

This statement underlines the fact that to interfere with the natural life cycle to expand man's life span through medical intervention was an essential pursuit to follow in the late eighteenth century. Behind this pursuit there was the Enlightenment thought, which promoted reason and scientific knowledge. At the center of the scientific motivations, there was a humanistic concern. In other words, Enlightenment thought emphasised the

development of humankind through reason and science. This pursuit is explained in the following quotation:

It also sought to provide answers to questions about the development and progress of human nature. Indeed, it was hoped that all this accumulated knowledge, spread over a multitude of disciplines, would ultimately improve the lives of mankind and provide practical results that would serve in the general progress of humanity. (McLean 3)

The nineteenth century was a period of developments manifested in several areas such as philosophy, science and technology with certain innovations like mastering electricity and mechanized industry, the construction of railways, the increasing use of steam engines, experiments in natural sciences and medical advancements (Otis xxvi-xxvii). However, among all these discoveries and remarks made in the nineteenth century, Charles Darwin's (1809-1882) evolutionary theory, which he explored in his *On the Origin of Species by Means of Natural Selection, or, The Preservation of Favoured Races in the Struggle for Life* (1859)³, and *The Descent of Man* (1871), furnished a profound contribution to understanding human life and human development. The theory formulated the idea of change in species and explored the scope of the definitions of animal and human.

After Darwin's *On the Origin*, it became a widely accepted notion that the biological structure of man is subject to evolution like animals. However, even before that, the human body was considered similar to the animal body in its biological formation. Regarding the similarity between animal and human body, a prominent French philosopher and physician, Julien Offray de La Mettrie (1709-1751) claims as follows:

In general, the form and the structure of the brains of quadrupeds are almost the same as those of the brain of man; the same shape, the same arrangement everywhere with this essential difference, that of all the animals man is the one whose brain is largest, and in proportion to its mass, more convoluted than the brain of any other animal". (qtd. in Carus 302)

_

³ In this thesis, the name of the text is given in abbreviated form as *On the Origin*.

Clearly, La Mettrie makes an analogy between human beings and animals, more specifically man and ape, underlining the affinities between them concerning the form of their brains. Moreover, as the quote suggests, he acknowledges human as an animal species.

In terms of the relationship between human and animal nature, the acknowledgement of the idea that man comes from the more primitive life forms to his present form is important, and this idea points to the theory of evolution. Although the theory is commonly associated with Charles Darwin (1809-1882), there exists many theorists and philosophers who promoted the existence of evolution in nature. Among these, Jean Baptiste Lamarck's (1744-1829) contribution to the theory of evolution is explained as follows:

Lamarck is best known for his *Theory of Inheritance of Acquired Characteristics*, first presented in 1801 ... [As theory suggests,] [i]f an organism changes during life in order to adapt to its environment, those changes are passed on to its offspring. He said that change is made by what the organisms want or need ... Lamarck also said that body parts that are not being used, such as the human appendix and little toes are gradually disappearing. Eventually, people will be born without these parts. Lamarck also believed that evolution happens according to a predetermined plan and that the results have already been decided. ("What Lamarck Believed")

As indicated, the evolutionary changes in the body are tied with acquired characteristics. Therefore, Lamark's ideas indicate the continual conservation of genetic heritage acquired by descendants (Burkhardt 734).

In addition to Lamarck, Robert Chambers (1802-1871) also focuses on the transmutation of the species in his *Vestiges of the Natural History of Creation* (1844) which provides a basis for the evolutionary theory investigated by Charles Darwin fifteen years later. Chambers suggests that there are grades of change in the advancement of forms get complicated as they advance, writing as follows:

Starting from the primeval germ, which, as we have seen, is the representative of a particular order of full-grown animals, we find all others to be merely advances from that type, with the extension of endowments and modification of forms which are required in each particular case; each form, also, retaining a strong affinity to that which precedes it, and tending to impress its own features on that which succeeds. (144)

According to the quotation, though the forms undergo a process of modification and turn into more advanced forms, the whole process begins with a "germ." In other words, all the advancements stem from a single origin and evolve into different species maintaining the kinship with the one preceded. He also confirms that similar organs in different animals function for the same purposes though they differ in shape and form exemplifying the lungs for mammals and gills for the fish (Chambers 145). Chambers's arguments about the advancement of the species due to the environmental changes are significant for they provide a basis for the evolutionary thought. Although his arguments were criticised by the scholars of the period for being based on "muddled concepts and fallacious theories," they contributed to the intellectual development of the evolutionists of the period (Schwartz 128-130). It is apparent that many scholars, even before *On the Origin of Species* already shared Darwin's evolutionary ideas.

Different from Lamarck, Darwin gives agency to the environmental and variational factors in a species's evolution. The difference between their approaches is explained in the following quotation:

Darwin believed that the desires of animals have nothing to do with how they evolve, and that changes in an organism during its life do not affect the evolution of the species. He said that organisms, even of the same species, are all different and that those which happen to have variations that help them to survive in their environments survive and have more offspring. The offspring are born with their parents' helpful traits, and as they reproduce, individuals with that trait make up more of the population. ("What Darwin Believed")

In his theory of evolution, Darwin emphasises that there is a continuous and gradual change and modification in the physical and behavioural characteristics of the species.

According to him, the adaptation is the primary force that makes evolution possible and is seen in every species and environment as he states:

How have all those exquisite adaptations of one part of the organisation to another part, and to the conditions of life, and of one distinct organic being to another being, been perfected? We see these beautiful co-adaptations most plainly in the woodpecker and missletoe; and only a little less plainly in the humblest parasite which clings to the hairs of a quadruped or feather of a bird; ... in short, we see beautiful adaptation everywhere and in every part of the organic world. (*On the Origin* 132)

Darwin analyses how such variety of species take their "perfected" forms and states that they are uniquely adapted into their environment to survive. By 'co-adaptations,' Darwin means that species adapt into one another and constitute the environment that they live in and exemplifies it with the fury body of an animal that provides a perfect environment for parasites to live in. This process of co-adaptation occurs within the 'natural selection' process in which all the species strive for survival. Darwin criticises the view that all these modifications occur by chance in nature:

When we look at the plants and bushes clothing an entangled bank, we are tempted to attribute their proportional numbers and kinds to what we call chance. But how false a view is this! What a struggle between the several kinds of trees ... what war between insect and insect ... between insects, snails, and other animals with birds and beasts of prey ... all striving to increase, all feeding on each other or on the trees and their seeds and seedlings. (On the Origin 141)

By the 'entangled bank,' Darwin refers to the whole ecological system which does not emerge from arbitrary developments but as a result of a continuous struggle among all the species. This quotation is significant within the context of this study for it underlines the relationship between the species and environment, and thus helps comprehend better the humans' adaptation and modification to the environment.

It is significant to note that Darwin did not apply the theory of evolution to human beings in his *On the Origin of Species* immediately. The progression of his views followed a cautious route. In his *On the Origin*, he examined the theory as an aspect that

affects the plants and animals, and then he applied it to humans in his *The Descent*. Although the prevailing works about the progressive change among the species softened the environment before Darwin's theory of evolution, as Peter J. Bowler asserts "to make it acceptable to the general public, he must [have] give[n] it a gloss ... to neutralize the prevailing moral concerns" (135). In other words, Darwin at first, did not publicise his theory because of social concerns. He projected his concerns about explaining the notion of struggle for existence to the people claiming that "I was so anxious to avoid prejudice that I determined not for some time to write even the briefest sketch of it" (qtd. in Glick and Kohn 310). Moreover, the criticisms against Chambers's *Vestiges* prevented him from publishing his theory immediately after his return from the Beagle voyage in 1836 (Richards, *Why* 47). Hence, these anxieties were not groundless since, as Martin Danahay asserts, "[e]volutionary theory was unsettling to the Victorians because it dissolved the boundary between the human and the animal" ("Introduction" 19).

Apart from these social concerns, Darwin was also worried about the potential criticisms that would emerge after applying the theory to the humankind, which was firstly applied to the animals and plants. Concerning this, Howard E. Gruber notes that "Darwin sensed that some would object to seeing rudiments of human mentality in animals; while others would recoil at the idea of remnants of animality in man" (qtd. in Richards, *Why* 152). Clearly, to equate animal to human was unacceptable for many people in the period, for which Darwin was cautious in his explanations about human being's closeness to animals. Gillian Beer, in his *Darwin's Plots*, asserts:

[i]n the *Origin* humanity lurks in the interstices of text, summoned and evaded, kept always out of the centre of attention, glimpsed askance in such a way that the reader must involve himself in a clandestine quest, seeking an anthropocentric signification for a text that extrudes humanity. (108-109)

As demonstrated, his work projects the theory of evolution via the species other than human but provides implications of the applicability of it to the humankind. Moreover, this approach also demonstrates that human evolution can be understood under the light of plant and animal evolution.

In his writings, Darwin puts human at the top of the evolution ladder and considers human as the highest version of an animal form. Darwin, in his *The Descent*, states that human stands at "the very summit of the organic scale" (405) which indicates the preceding primitive bodies that humans came from. Therefore with this vision, he attributes certain qualities of humans to animals and plants like struggling to survive "from the war of nature, from famine and death" (On the Origin 397). Moreover, by 'natural selection' he emphasises that there is a kind of natural elimination system in which all species strive to survive (On the Origin 144-5). Darwin explains natural selection by claiming that "any variation ... if it be in any degree profitable to an individual of any species in its infinitely complex relations to other organic beings and to external nature, will tend to the preservation of that individual, and will generally be inherited by its offspring" ("On the Origin 132-133). In other words, he suggests that the existence of the genetic inheritance of a species depends upon the profit that it brings to that species in terms of its survival. In *The Descent*, Darwin claims that human beings evolve into human form following a succession and states his aim of explaining this succession as follows:

The sole object of this work is to consider, firstly, whether man, like every other species, is descended from some pre-existing form; secondly, the manner of his development; and thirdly, the value of the differences between the so-called races of man. (*The Descent* 2-3)

Ostensibly, his theory suggests that humans are descended from a progenitor and take their current bodily form as a result of the evolutionary process.

This theory contradicts with the conventionally accepted 'anthropocentric' perspective which positions human at the center of the terrestrial life with its suggestion that human beings, like all the other species, are subject to change and evolution (Hurley 56). Since the theory proposes 'natural selection' (Darwin, *On the Origin* 161) and classifies man as an animal, it clashes with the religious doctrine of the distinct creation of humans in God's image. With this theory, it is unveiled that, "[h]umans those upstart beasts, are no longer the final aim of natural history – not to mention a divine plan – but the contingent products of natural selection" (Richter 3). Although Darwin does not detect

any contradiction between his theory and religious norms⁴, his theory reveals that species evolve from more primitive species by undergoing a process of change; "modification and coadaptation" (*On the Origin* 97). Moreover, the theory "dissolve[s] the previously accepted boundaries between human and animal" by suggesting the affinity between them (Punter and Byron 42). In other words, it underlines that humans are not different from animals biologically as they are subject to evolution like animals. Concisely, the theory demonstrates the primitivism and animality inherent in human being's essence and also human's undergoing a process of mutation and change by modifying themselves into their environment. For this reason, his theory provided a scientific insight into the descent of man and made a huge impact considering the scope of the identification of human.

However, such a striking theory which re-evaluates the scope of the definition of human also prompted anxiety about the state of humanity at the period. Regarding this anxiety, Allan Lloyd-Smith states that "Darwinian ideas produced a crisis in familiar conceptions of the status of the human, intensifying anxiety about the body and about the role of genetic inheritance and unsuccessfully repressed instinctual behaviour" (110). It is clear from this statement that human beings became more alert and anxious about their or other people's tendency to instinctual behaviour and its potential connection with their genetic inheritance. Moreover, the concerns about the genetic inheritance revived a flow called 'eugenics'. This flow emerged after Francis Galton (1822-1911) who suggested that rational and professional people should reproduce in order to be sure that the future generations will have the best genetic inheritance while the poor and irrational should be dissuaded from reproduction (Burdett). This amounts to saying that eugenics notion pursued to eliminate the "irrational" to ensure the continuation of the "better" offspring. Concerning the relationship between eugenics and the Darwinian theory of evolution, Brian E. Hack states that eugenics was "the quasi-scientific application of Darwinism to the conscious breeding of stronger, smarter and more ethical human beings" (79). In other words, behind the eugenics ideas, there

_

⁴In the second edition of *On the Origin*, Darwin argued that "probably all the organic beings which have ever lived on this earth have descended from some one primordial form, into which life was first breathed by the Creator"(qtd. in Sapp 35). Nevertheless, as John Cartwright asserts, "Darwin lost the last remnants of his Christian faith around 1851" (185).

lied the theory of evolution, which emphasised nature's elimination system for the better ones to remain and survive. In eugenics sense, this betterment included both physical appearance and physiological traits as Ruth Watts asserts: "[a]cross Europe, indeed, fears of a 'superior' white 'race' being swamped by 'inferior' ones led to obsessions with measurements of cranial size and brain weight which had gendered as well as racial" (781). As demonstrated, the theory created a kind of unrest in humans, and the thoughts on genetic inheritance prompted a tendency to differentiate and marginalize the people who are "unfit" both in the physical and the racial sense.

In addition to these concerns, people were also anxious about the possibility of turning into more primitive beings if evolution were to proceed in reverse direction. Influenced by Darwin's ideas, psychologists of the period associated mental illnesses with "degeneration hypothesis" (Ackerknecht 54). In other words, the mental illnesses were associated with the emblems of primitivism. Moreover, evolutionists, anthropologists and psychiatrists of the period, thought that there might be a link between the progress of society and physical and social pathology which eventually culminated in the emergence of degeneration theory (Jalava 417). The notion of animal essence in human nature merged with the degeneration theory that arose at the period and manifested in many areas like "evolutionary biology, medicine and social evolutionary ideas" (Gordon 81). The degeneration theory was based upon the reverse progression of the evolutionary process. The theory not only posed a challenge to the progressing Victorian society but highly influenced various areas at the period as stated: "founded on the Darwinian revolution in biology, and harnessed to psychological medicine, the idea of degeneration spread to social science, to literature and art" (Greenslade 16). Hence, this theory also became a source of inspiration for the literary works of the period. Thus, it can be deduced that Darwin's theory contributed to the formation of the degeneration theory, which inspired the literature of the period.

Benedict Augustus Morel (1809-1873) formulated the concept of degeneration. The term, according to Morel, refers to "an irreversible physical and mental deterioration from a higher to a lower form" (Zachar and Krueger 892). In other words, it is the

situation when a species or a human does not follow the progressive direction of evolution but instead devolves into its primitive version. In his *Traité des dégénérescences* (1857), Morel made a scientific insight into the elements that trigger mental deficiency and cause a hereditary degeneration in humans. Believing that degeneracy and moral decline is a result of an original reason he claims:

[He] ha[s] reason to believe that ... the difficult question of degeneration in humans, should be studied for its origin, and scientifically pursued by examination of the new conditions that had to create in man the great event of the Original Sin (chuté originelle). (qtd. in Villa 9)

As demonstrated, Morel makes a correlation between the creation of man in God's image and Adam's pure and divine physical perfection. However, this perfection becomes tainted after the original sin and decreases even more in his offspring. Morel asserts that "[d]egenerations are deviations from the normal human type which are transmissible by heredity and which deteriorate progressively towards extinction" (qtd. in Ackerknecht 55). Morel also makes a correlation between mental illnesses and biological heredity and states that madness is a result of an original infection that passes from the first generation to the fourth generation. His view is explained as follows:

The first generation, infected by such modern poisons as urban pollutants and addictive stimulants, passed its infection through the "seed": to a second generation prone to epilepsy, neurasthenia, and hysteria, a third generation hovering near the brink of insanity, and a fourth and final generation doomed to congenital idiocy and sterility. (Hurley 66)

Thus, with his contribution, Morel emphasises the significance of genetic background in the diagnosis of mental disorders.

In addition to Morel, many other scholars also examined the subject. Among these, Edwin Ray Lankester (1847-1929) makes a correlation between Darwin's evolutionary ideas and suggests that natural selection might result in three ways: "to keep it in status quo; to increase the complexity of its structure; or lastly to diminish the complexity of its structure. We have as possibilities either Balance, or Elaboration, or Degeneration"

(Lankester 29). In other words, he suggests that natural selection might result in the species' degeneration. He further explores the concept collaterally with the evolutionary idea stressing as follows:

In accordance with a tacit assumption of universal progress – an unreasoning optimism – we are accustomed to regard ourselves as necessarily progressing, as necessarily having arrived at a higher and more elaborated condition than that which our ancestors reached, and as destined to progress still further. On the other hand ... we are subject to the general laws of evolution, and are as likely to degenerate as to progress. (Lankester 59-60)

As stated, degeneration is considered to be a possible result of evolution. Thus, although there are similarities between Morel's and Lankester's arguments, the concept cannot be framed in one definition. Considering this, Daniel Pick asserts that "it was a shifting term produced, inflected, refined and re-constituted in the movement between human sciences, fictional narratives and socio-political commentaries" (7).

Within the concept of degeneration, 'atavism' involves a significant place. In 1909, the term was defined as "the hereditary reappearance of characteristics which were latent in the parents at least, but which were expressed in definite ... ancestors near or remote" (Thomson 167). In his criminological studies, Cesare Lombroso makes a connection between the atavistic physical nature of man and his tendency to crime stating that criminal men are distinguishable among other people as they "bear anatomical signs of their apishness" (133). In other words, he suggests that criminal man is lower in comparison to the ordinary man in the evolutionary sense. In his study on the Italian prisoners, he expresses the atavistic features that criminals have as:

the enormous jaws, high cheek bones, prominent superciliary arches, solitary lines in the palms, extreme size of the orbits, handle-shaped ears found in criminals, savages and apes, insensibility to pain, extremely acute sight, tattooing, excessive idleness, love of orgies, and the irresponsible craving of evil for its own sake, the desire not only to extinguish life in the victim, but to mutilate the corpse, tear its flesh and drink its blood. (qtd. in Gould 133)

As reported, criminals display specific physical characteristics that resemble human progenitors. Thus, atavism and degeneration constitute the frame of Lombroso's argument.

The degeneration theory, which merged with the theory of evolution, permeated in various areas, including literature. The ape imagery emerged after the theory influenced the characters represented in the literary works of the period. Regarding this, Brian Regal notes as follows:

Though ape and evolution cartoons and references in literature had been appearing in England since 1840s, with the appearance of *The Origin of Species*, the ape and the image of the brute, became a popular device to insult individuals and entire groups. ... Popular culture began to sag under the growing weight of the monkey imagery of novels, newspapers, articles, learned books and cartoons that alternately ridiculed, satirised, supported and condemned evolution. (182)

As it is stated, the brute ape-like imagery functioned as a tool to insult some people and groups. Moreover, in literature, the degenerate bodies represented fears of the society in terms of social and racial decline (Burdett). As a result, degeneration became a popular theme in the literary works of the period.

In literary representations, the degenerate body stands for the embodiment of primitivism, but at the same time, the strangeness and mismatch of this body give it a monstrous characteristic. In other words, the primitiveness of the body is the main factor that makes it monstrous. Since the characteristic traits of the degenerate body are associated with atavism, namely with human's progenitors, primary features of this body appear in the form of being instinctual and animalistic. As for the body's monstrosity, it is stated that "[t]he discursive space separating human and animal ... becomes a zone or site of figural possibility and impossibility best captured in the figure of the monster" (Ortiz-Roblez 22). In other words, the state of in-betweenness, namely, to be a civilised human or a primitive being with animalistic traits within the context of degeneration is reflected in the body of the monster.

Monsters in literature, as Jeffrey Jerome Cohen emphasises, "are disturbing hybrids whose externally incoherent bodies resist attempts to include them in any systematic structuration. And so, the monster is dangerous, a form suspended between forms that threatens to smash distinctions" (6). In other words, the monster reflects a state that cannot be categorised due to its uncanny nature in the physical sense, and for this reason, its presence poses a danger. Moreover, the monster's existence and its uncategorised nature underline its otherness and difference from the ordinary. Considering this, Paul Goetsch stresses that a monster "dwells at the gates of difference" (17-18). Additionally, 'monstrous' as a term, is defined as being "inhumanly or outrageously evil or wrong" ("Monstrous"). Therefore, the monster is distinct and extraordinary, and this very extraordinariness is also associated with the evil in the nature of the monster. In terms of the origin of monstrosity, Simona Dragăn provides a theoretical insight:

[M]onstrosity is defined and perceived by people as an extreme form of abnormality, either physical or mental, and, particularly, as a single or multiple manifestation of deformities or infirmities that can be either innate, or developed, or imagined, or indicative of obvious forms of degeneration. (1)

It is clear from this statement that monstrosity is associated with bodily and mental malformation and that while it can be an innately inherent feature, it can also emerge afterwards or indicate an emblem of degeneration. In a similar vein, Elaine L. Graham asserts that monstrosity as a discourse unveils the borders between humans and nonhumans and as she notes "[monsters] serve both to mark the fault lines, but also, subversively, to signal the fragility of such boundaries" (12). It is probable to argue that monsters also stand for the embodiments of what a human could possibly transform into. This potential stems from the fragility between the human and nonhuman as Graham emphasises. In this regard, the presence of monsters also reflects the fragility of the natural order. Considering this, Margaret Shildrick's assertion about the state of the monster as the embodiment of "other ways of being in the world" (10) projects the logic behind the emergence and the characteristics of the degenerate monster. Moreover, in her assertion, Graham refers to the nonhumans as "almost-humans" (12), which can also be interpreted as the primitive humans, namely

the progenitors of humans. Consequently, these identifications and ideas about the monster and monstrosity indicate a similarity among the representations of the degenerate beings in literature.

According to these perspectives, the traces of degeneration theory merge with the theme of the monster and monstrosity. Therefore, the theory of evolution contributes to the formation of the theory of degeneration though it emerges slightly before the publication of Darwin's On the Origin. Inspired by the logic behind the degeneration theory, authors of the period create degenerate characters in their works. The fears and concerns that lie behind degeneration and decline in both physical and moral sense are explored under the discourse of Fin de Siécle⁵ in the literature (Pykett 1-2). What is significant concerning these works is that they treat decay and degeneration as an indicator of monstrosity. The characters depicted in these works exhibit bizarre and deformed physical structures and mental disturbances and, consequently, become monstrous. In other words, while the emblem of degeneration leads to the evolutionary past, the degenerate characters display certain characteristics of monstrosity since "monsters, in one form or another, were an omnipresent feature of our evolutionary past" (Saler and Ziegler 224). Among these works, Robert Louis Stevenson's novel The Strange Case of Dr. Jekyll and Mr. Hyde (1886) is an example which explores how a degenerate character also exhibits monstrous features. In this sense, it is possible to argue that Darwin's theory of evolution contributes to the formation of the degeneration theory and indirectly becomes a source of inspiration for the degenerate characters represented in the literary works of the period.

However, Darwin's contribution to science and human anthropology was way beyond his period as Nick Bostrom states: "[a]fter the publication of Darwin's *On the Origin of Species* (1859), it became increasingly plausible to view the current version of humanity not as the endpoint of evolution but rather as a possibly quite early phase" ("A History" 3). As stated, the theory challenged the conventional notion of physical embodiment, revealing that human beings continually evolve and that the current form

⁵ The term means "[r]elating to or characteristic of the end of a century, especially the 19th century" ("Fin de Siecle")

of humans is not the end point of evolution. As a result, the theory brought about the idea that technology can be the means of the next stage in evolution. Since the basic argument of the theory of evolution is to reach more fertile and healthier new generations through natural selection, this idea forms the basis of a relatively new movement: transhumanism.

Transhumanism movement, which is commonly referred as transhumanist thought, emphasises the continuing enhancement of humans, means of scientific, medical and technological applications and its relationship with the Darwinian theory of evolution is demonstrated as follows:

What transhumanists wish to achieve is, ... the eradication of diseases of genetic origin ... extending human lifespan, etc. These goals are, in light of the Darwinian theory of evolution, not only goods in themselves, but also means to an end: the chance to have fertile offspring. We may safely assume that such features as long life, general healthiness (or at least being free of genetic diseases), mental stability, generally raise the chances of having a satisfying life, but also fall easily under the Darwinian logic of evolution. (Bardziński 105-6)

Francesca Ferrando explains the concept claiming that "[h]uman enhancement is a crucial notion to the transhumanist reflection ... and the main keys to access such a goal are identified in science and technology" (27). As stated, transhumanism as a concept aims to enhance human and to achieve a more developed human state. Thus, the major concern of Darwin's theory, which emphasises the enhancement of human and having fertile offsprings, corresponds to the primary motivations of transhumanism movement. Both approaches reinforce human being's development and evolution. Though Darwin explores this process within the natural selection, transhumanists focus on technological means in human enhancement. Considering their relationship, Charles T. Rubin states:

[T]ranshumanism builds on the very same underlying conception of nature that the Malthusians and Darwinians build on, vociferously rejecting the thought that nature has any inherent normative goals or purposes. While it rejects blind evolution as a future fate for man, it accepts it as the origins of man. (qtd. in Bardziński 105)

However, there are different ideas about the relationship between the theory of evolution and its connection with transhumanist thought. Many transhumanists consider the natural selection suggested within the theory of evolution as a slow progression and aim to surpass this slow progress by technological and engineered applications (Askland 72).

The term was firstly coined by Julian Huxley in 1950 to name the belief that human beings are able to transcend themselves. He explains the notion as follows:

The human species can, if it wishes, transcend itself – not just sporadically, an individual here in one way, an individual there in another way, but in its entirety, as humanity. We need a name for this new belief. Perhaps transhumanism will serve: man remaining man, but transcending himself, by realizing new possibilities of and for his human nature. "I believe in transhumanism": once there are enough people who can truly say that, the human species will be on the threshold of a new kind of existence, as different from ours as ours is from that of Peking man. It will at last be consciously fulfilling its real destiny. (Huxley 17)

Believing that "man" will be "remaining man", Huxley suggests the term as human being's ability to finding ways for advancement which according to Ronald Cole-Turner stands for the "the future of evolution ... which is being driven forward not just by genetic mutation and natural selection but also by technology aimed at transcending the evolved form of the human species" (12). After Huxley, the notion of transhumanism changes and transforms into an expression emphasising individual being's transgression of their physical and intellectual limits through the use of technology.

The movement most crucially focuses on human enhancement while the means of such a goal are identified within technology and science. In his "In Defence of Posthuman Dignity" (2005), Nick Bostrom explains the concept as follows:

Transhumanism is a loosely defined movement that has developed gradually over the past two decades, and can be viewed as an outgrowth of secular humanism and the Enlightenment. It holds that current human nature is improvable through the use of applied science and other rational methods, which may make it possible to increase human health-span, extend our

intellectual and physical capacities, and give us increased control over our own mental states and moods. Technologies of concern include not only current ones, like genetic engineering and information technology, but also anticipated future developments such as fully immersive virtual reality, machine-phase nanotechnology, and artificial intelligence. (202-3)

Bostrom's remarks about transhumanism demonstrate that rationality of mind is foregrounded over the physicality of the body. They also underline that the physical and intellectual capacity of human can be enhanced via technological and scientific applications. Concisely, as these remarks demonstrate, technological and scientific applications are the essential elements of human enhancement in transhumanism.

Moreover, applying technology to the human body contributes to the evolutionary process as this process "usher in another form of evolution: technology" (Kurzweil 407). Apart from contributing to the human evolutionary process, applying technology to the human body also changes the definition of the human as it degrades human into a subject of an experiment. In the pursuit of developing human capacities via technology lies the concern of transcending the human limits and achieving a kind of superiority over nature. The intrusion of technology and bioengineering allows men to achieve a kind of "singularity," which Kurzweil explains as follows:

The Singularity will allow us to transcend these limitations of our biological bodies and brains. We will gain power over our fates. Our mortality will be in our own hands. We will fully understand human thinking and will vastly extend and expand its reach. (17)

According to these remarks, the transhumanism movement centers around human and aims to improve human agency. Regarding this, Robert Ranish and Stefan Lorenz Sorgner state that the concept is considered to be "an intensification of humanism, a type of hyper humanism" ("Introducing" 8).

Although the terms transhumanism and transhuman are used interhchangeably, these two concepts do not have exactly the same meaning. While transhumanism emphasises human development and enhancement by employing technology and science, transhuman stands for the embodiment of these ideals. In other words, it refers to the technologically or scientifically advanced or modified being who is more like a human in most respects (Carvalko 13). FM-2030⁶, in his *Are You Transhuman?* (1989) states that transhumans are "the earliest manifestations of new evolutionary beings" (205). Thus, they can be defined as humans who are enhanced by technological and scientific interventions. John Loeffler defines transhuman as follows:

A transhuman ... is someone who has taken this step and upgraded their body in a way that doesn't just fix a deficient part to behave as commonly expected but replaces something that works perfectly fine in order to do something more than is biologically possible. (Loeffler)

As can be observed, transhuman is defined as a technologically developed and superior human who surpasses human's biological limits. In other words, the concept refers to a developed and advanced subject who undergoes technological and scientific modifications.

Transhumanist, on the other hand, means the person who embraces the fundamental arguments of transhumanism. Bostrom expresses the major motivations of these people as follows:

Transhumanists hope that by responsible use of science, technology and other rational means, we shall eventually manage to become posthuman, beings with vastly greater capacities than present human beings have. ... This vision, in broad strokes, is to create the opportunity to live much longer and healthier lives, to enhance our memory and other intellectual faculties, to refine our emotional experiences and increase our subjective sense of well-being, and generally to achieve a greater degree of control over our own lives. (4)

As stated, transhumanists are those who aim to lead a long and healthy life, to increase intellectual capacity and memory and to achieve a better version of themselves in general terms through scientific and technological practices. In this sense, these two

⁶ The scholar changes his given name, which was Fereidun M. Esfandiary, believing that in 2030 with the scientific possibilities, people will be able to live forever and accordingly they will be liberated from the traditional and ethnic borders of given names (Manzocco 62).

concepts are included within the scope of transhumanism movement due to the primary objectives that they reflect.

Transhumanism as a concept is generally considered to function as a bridge between human and posthuman which is explained within the theory of posthumanism. James Steinhoff evaluates the process of achieving the posthuman state claiming that "[t]his transition is to be accomplished primarily by technological means in a transfer of control over the process of evolution from natural selection to conscious human direction" (2). While transhumanism is generally considered to be the advancement of the human body and intellect through technology, posthumanism acknowledges a nonanthropocentric approach which dismantles the idea of human's superiority among all the other species. Nevertheless, both seeks to redefine the human concept with a broader view. Though they have a common interest in technology, the way they approach this notion differs from each other, as posthumanism does not put technology into its major focus. As Francesca Ferrando asserts, "[p]osthumanism investigates technology precisely as a mode of revealing, thus reaccessing its ontological significance in a contemporary setting where technology has been mostly reduced to its technical endeavors" (29). To understand the primary differences and similarities between these concepts, it is crucial to understand the primary arguments of posthumanism theory.

Rejecting the traditional Western humanist ideals, "posthumanism" suggests a new understanding regarding the concept of human, which attributes importance to man's relationship with the living and non-living entities in nature. The theory, as stated, "seeks to undermine the traditional boundaries between the human, the animal, and the technological" (Bolter 1). In other words, it emphasises that human is not distinct from the nonhumans in the ontological sense. Similarly, reinforcing the idea of continual enhancement in human beings, an eminent scholar of the field Pramod K. Nayar identifies posthumanism as "the radical decentring of the traditional sovereign, coherent and autonomous human in order to demonstrate how the human is always already evolving with, constituted by and constitutive of multiple forms of life and machines" (*Posthumanism* 11). Hence, posthumanism emphasises an existence which is 'constituted by and constituted of' many other bodies, and inanimate entities. In this

sense it reinforces a multispecies existence. It replaces the conventional concept of human with a new concept that involves an interaction with the living and non-living entities. In this respect, it gives agency to exterior factors that constitute human.

Determining the genealogy of this theory, Cary Wolfe and Natasha Lennard state that Darwinian thought contributes to the posthumanism by decentralizing the human and giving agency to the nonhuman world ("Is Humanism"). Sharing the same opinion, Nicole M. Merola considers Darwin's understanding of the species and their connection with each other as proto-posthumanist since Darwin puts humans into the same place as all the other species (335-336). Similarly, Andy Miah also asserts that "Darwin's biological humanism allow[s] the human to be reduced to a level of mechanics, a view that pervades contemporary understandings about being human" (82). Moreover, Darwin's theory of evolution also comprises the essence of the human's co-existence with his progenitors as Darwin notes in his *The Descent*: "man is the co-descendant with other species of some ancient, lower, and extinct form" (3). This assertion is in parallel with the anti-anthropocentric thought that posthumanism emphasises. Thus, the notion of human being's animality stemming from the Darwinian perspective becomes a subject of debate among the posthumanist thinkers as well (Bolter 3).

Posthumanism theory, which is also commonly referred to as posthumanist theory, deals with the same relationship between the species and its environment by decenralising human in this relationship. However, it goes beyond looking solely at organic beings and involves certain inanimate technological matters like tools, prosthetics and biotechnological applications as the means of bodily modifications within the concept of human. For posthumanism, there is not a concrete difference between animals, plants, humans, inanimate matters or technologies in terms of their hierarchical stance in nature since they all interact with and influence one another. Andy Miah stresses that "history of posthumanism has no obvious beginning, middle or end point in philosophical thought" (95). However, the concept first appears in the article "Prometheus as Performer: Toward a Posthumanist Culture?" written in 1977 by Ihab H. Hassan who expresses the notion as follows:

At present, posthumanism may appear variously as a dubious neologism, the latest slogan, or simply another image of man's recurrent self-hate. Yet posthumanism may also hint at a potential in our culture, hint at a tendency struggling to become more than a trend. ... 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)

As stated, it is considered to be a necessity that the idea of humanism must be replaced by the posthumanism. Considering this new perspective, which rejects the humanistic ideals, the leading scholars such as Stefan Herbrechter, Rosi Braidotti, Cary Wolfe and Promod K. Nayar make different genealogies.

Stefan Herbrechter, in his *Posthumanism: A Critical Analysis* (2013), examines posthumanism concentrating mainly on technologization of the twenty-first century. In his work, firstly he mentions the human concept as a cultural construct, stating that "[h]umans and their humanity are historical and cultural constructs rather than transcendental concepts free from ideology and they therefore have to be placed within larger concepts like ecosystems, technics or evolution" (Posthumanism 9). Moreover, he also stresses the posthumanism cannot be thought without certain elements like artificial intelligence and technology stating, "[t]he interconnection between human and technology ... coincides with the intensified prosthetisation of humans and their bodies and with their environment, which, in the end, become 'internalised'" (Herbrechter, Posthumanism 79-50). Herbrechter also emphasises that the digitalization in general and digital technologies as the way of acquiring knowledge change the definition of information since they, as he suggests, "transform everything into information" (Posthumanism 78). This transformation also involves humans. In other words, in the process of becoming posthuman, unity and totality leave their place to dissolution due to the technological changes. As a last remark, he defines posthumanism as follows:

Posthumanism may be understood as the demand for an anthropology of a new, posthuman society with its moral, political, ecological and so on premises, on the one hand, and for a history of technology (technics) and media, with their fundamental co-implications between human, technology, information, culture and nature, on the other hand. (*Posthumanism* 193)

In this sense, posthumanism refers to a necessity of a new understanding or a new discourse concerning the human concept which embraces moral, political and ecological aspects in its conceptualisation. Moreover, the relationship between technology and human shapes the culture, which eventually influences nature according to Herbrechter. He suggests that technology and scientific invention are the very elements that construct human history and the concept of modern human today, since through them human beings could be able to control their environment ("Stefan Herbrechter Interview"). Seeing the technological extensions such as 'prosthesis' as the integral parts of human, Herbrechter notes as follows:

Today we've reached a stage of prosthesisation (involvement between human bodies and technological devices or media) where these prostheses are no longer extensions of the human body, but some would argue that the prostheses we have now will increasingly demand an adaptation from our side [...] and that's why we need, according to them, embrace and even accelerate our becoming "cyborgs". ("Stefan Herbrechter Interview")

In other words, technological extensions that humans make use of are considered to be the things that human beings will adapt into. In this regard, they constitute the environmental factors that shape humans in the evolutionary sense.

Similar to Herbrechter, Rosi Braidotti in *The Posthuman* (2013) states that the concept of humanity necessitates a new discourse, a more universal definition which as she states can be achieved "with a more complex and relational subject framed by embodiment, sexuality, affectivity, empathy and desire as core qualities" (26). Braidotti emphasises that the theory's major premise stems from the convergence between the anti-humanism and anti-anthropocentricism (*The Posthuman* 13). She further elaborates this connection suggesting that anti-humanism criticises the humanist view of the ideal man where anti-anthropocentricism criticises the superior state of human in the hierarchical order. Apparently, she claims that the theory bases its origins on the problems that these two apriori theories unveiled. She defines posthumanism as "the historical moment that marks the end of the opposition between Humanism and anti-humanism and traces a different discursive framework, looking more affirmatively towards new alternatives" (*The Posthuman* 37). In other words, according to Braidotti,

the concept challenges the concrete border between what is human and what is nonhuman and also the constructed scientific discourse that frames the idea of human as the superior one among all the entities. She promotes a new discourse that does not affirm human centrality in defining nonhuman animals but rather their independence from it.

Braidotti also focuses on the human and machine interaction and considers this union as a liberation from the anthropocentric assumptions, which conceive machines as things that humans draw advantage from. Influenced by Deleuze and Guattari's notion of 'becoming-machine' which she defines as "a playful and pleasure-prone relationship to technology that is not based on functionalism," she explores the network between human and technology in a liberating approach (*The Posthuman* 91). According to her, a posthuman subject internalises a manner that seeks for a mutual benefit for both human and machine in a technologically mediated world, which eventually ends consumer and product relationship between the two. Such an approach creates an empathetic understanding considering the human and machine relationship. In this regard, to achieve such a manner, machines must be considered as distinct entities independent from the meaning that they get from their interaction with humans. She further emphasises that evolution of machines should be evaluated beyond their relationship with humans and notes: "I think that the point of the posthuman predicament is to rethink evolution in a non-deterministic but also a post-anthropocentric manner" (Braidotti, *The Posthuman* 94). These remarks precisely challenge the anthropocentric worldview for they give agency to technological means. Thus, the approach basically criticises the notion that human beings are the most superior species among all the other beings for making reasonable deductions. Thus, as a rule, posthumanism considers how people, human idea, and society are reshaped or risen above by human upgrade or the digitalization of regular daily existence. Reinforcing an understanding which rejects the anthropocentric perspective, it redefines human as part of the techno-scientific world and refers to a state beyond human. It also embraces a transspecies existence, especially because of the new technologies and new forms of life which leave the conventional concept of human behind.

A similar anti-anthropocentric approach can be observed in Cary Wolfe's ideas about the theory. According to Wolfe, posthumanism aims to "fully comprehend what amounts to a new reality: that the human occupies a new place in the universe, a universe now populated by what I am prepared to call nonhuman subjects" (*What is* 47). She also underlines that this new discourse does promote modesty and a kind of awareness considering the state of human asserting as follows:

[T]he human occupies a new place in the universe, a universe now populated by what I am prepared to call nonhuman subjects. And this is why, to me, posthumanism means not the triumphal surpassing or unmasking of something but an increase in the vigilance, responsibility, and humility that accompany living in a world so newly, and differently, inhabited. (*What is* 47)

In other words, the theory promotes an understanding of human not as a distinct or special being but as a being in relation to and in connection with nonhuman subjects. According to Cary Wolfe, "posthumanism isn't posthuman at all—in the sense of being 'after' our embodiment is transcended—but is only posthumanist, in the sense that it opposes the fantasies of disembodiment and autonomy, inherited from humanism itself' (What is xv). Mainly, the concept decentralises human and rejects the boundaries that divide human and nonhuman; instead, it promotes the idea of interconnectedness between all living creatures. In addition to that, according to Wolfe animals are the diminished forms of humans, they are as she notes "diminished or crippled versions of that fantasy figure called the human" (What is 45). According to this notion, the concrete border between the human and animal is blurred as it is considered to be a result of a 'fantasy figure'. This approach as mentioned above corresponds to the acknowledgement of human's animal ancestors that is explored in Darwinian theory of evolution. It also underlines that posthumanism re-conceptualises what is considered to be other than human.

Focusing on the same concern, Pramod K. Nayar also lays emphasis on human's interactions with the other species and environments adopting an anti-anthropocentric approach. Considering the issue, Nayar claims as follows:

In posthumanist vision, we acknowledge that we *are* Others, and therefore the human intolerance of the Other's difference – of ethnicities, life forms, species, bodies, skin color, languages – is not simply untenable but also unethical since we have evolved *with* and live because of, these 'others' and share more than just the Earth with them. (*Posthumanism* 47-48)

According to Nayar, posthumanism adopts an approach that manifests in the mutual interaction between all the living and non-living entities and emphasises the aspects of co-existence and co-evolution in defining human. In this regard, the concept embraces a multispecies existence, as "it is all about the embedding of embodied systems in environments where the system evolves with other entities, organic or inorganic, in the environment in a mutually sustaining relationship" (Nayar, *Posthumanism* 51). Thus, what these perceptions and arguments have in common is that the concept rejects the notion of human's superiority to the other living and non-living beings, but instead accepts that humans have a mutual relationship with the nonhuman animals and inanimate matters.

Posthuman, on the other hand, is considered to be an entity or a condition who or which demeans the humanistic ideals. It is, as noted, "a condition in which the foundational status of humanism has been undermined ... expressed in the postmodern incredulity towards Enlightenment narratives of emancipation and material progress" (Roden, "A Defence" 1). However, there are many different approaches and identifications concerning the state of posthuman. N. Katherine Hayles does not entirely accept that posthuman stands for the end of human, and notes as follows:

It signals instead the end of a certain conception of the human, a conception that may have applied, at best, to that fraction of humanity who had the wealth, power, and leisure to conceptualize themselves as autonomous beings exercising their will through individual agency and choice. (286)

Thus, posthuman represents a new and a distinct ontology which can be regarded as the embodiment of a non-anthropocentric way of existence on the earth. It is clear that the posthuman subject is the concrete form of the major argument of posthumanism theory. This state is also the embodiment of the notion of multispecies existence, which is one

of the primary arguments of the theory. As a matter of fact, Rosi Braidotti identifies posthuman as "a relational subject constituted in and by multiplicity" (*The Posthuman* 49). As indicated, this being exists in the multiplicity of bodies. Moreover, posthuman is also regarded as an entity that is more developed and powerful compared to the human. As Bostrom notes, posthumans are those who have "a general central capacity greatly exceeding the maximum attainable by any current human being" ("Why I" 28). In other words, this state defines an entity who or which surpasses the physical and intellectual capasities of human.

As this state creates a contrast with the normative human concept, the major aspect that defines posthuman is its difference from the human. Considering this, Braidotti claims that the posthuman subject "works across differences and is also internally differentiated" (*The Posthuman* 49). In this sense, posthuman arises precisely from this very aspect of difference, though it does not conceptualise difference in an anthropocentric way. Regarding this, it is stated as follows:

The posthuman does not necessitate the obsolescence of human; it does not represent an evolution or devolution of the human. Rather it participates in re-distributions of difference and identity. The human functions to domesticate and hierarchize difference within the human (whether according to race, class, gender) and to absolutize difference between the human and the nonhuman. The posthuman does not reduce difference-from-others to difference-from-self, but rather emerges in the pattern of resonance and interference between the two. (Halberstam and Livingston 10)

As demonstrated, posthuman represents the very condition of divergence from the anthropocentric notion of difference. In a similar vein, Cary Wolfe stresses that "it generates different and even irreconcilable definitions" (*What is* 12). However, since the posthuman state cannot be defined within the framework of human-centric perceptions, this situation causes posthuman to be seen as ambiguous and uncanny.

Since posthuman body consists of many other bodies and evolves together with them, it is commonly regarded as monstrous in the literary representations because of the ambiguity and uncanniness ascribed to it. In other words, as posthuman comes out as a

strange and uncanny entity, it is considered to be monstrous. Donna Haraway identifies monsters as "inappropriate/d others" (*The Promises* 295) in that they become monster because their very beings create a contradiction with the normative human. While on the one hand the monstrosity is considered to mainly originate from the deformities in their bodies, on the other hand, it also arises from the potential threats that these distorted bodies might create in the society. This idea, however, basically stems from the fact that the monster as a being stands for other than the usual in society as it "destabilises the grand narratives of biology, and evolutionary science and signifies other ways of being in the world" (Shildrick 10). This destabilisation and the uncanny existence, which stands for the possibility of 'other ways of being,' refers to the state of posthuman. Focusing on the same aspect, Elaine Graham explains why posthumans are considered as monstrous as follows:

In their capacity to show up the 'leakiness' of the bodily boundaries ... this emergent array of hybrid creatures are arguably 'monstrous' not so much in the horror they evoke but in their exposure of the redundancy and instability of the ontological hygiene of the humanist subject. (12)

In other words, the reason these posthuman entities are seen as monstrous is that they are inexplicable within the framework of humanist ontology. Therefore, the monster concept is intertwined with the posthuman concept and this underlines the necessity of an anti-antropocentric definition for the posthuman condition.

Since the fundamental point in these theories is the reconceptualization of the human, the nineteenth-century period provide a great insight concerning the aim of achieving the posthuman state, since as represented in certain literary works, the human body is used as a mediator on which scientific, medical and technological developments are experimented to reach more sublime selves. Such experiments, on the one hand, display the concept of decentralisation of the traditional human, and on the other hand, demonstrate an existence in conjunction with other human and nonhuman beings, which indicates the primary argument of posthumanism. The means of achieving such a posthuman state manifest in many areas of science and the traces of these sciences are found in the literary works of the period. In this regard, Mary Shelley's *Frankenstein*

provides a great insight into the sciences of achieving this posthuman state. Certain scientific ideas about the period also explain why Shelley commissions Victor, the protagonist of the novel, to create a new species. In relation to Shelley's science, it is stated that "[a]s the science of change, chemistry embodies the principle of transformation that underlies Shelley's posthuman body and its progeny" (Sheehan 247). However, not only chemistry but also the use of electricity and the dissection practices can be considered as the means of achieving the posthuman state.

Luigi Galvani's (1737-1798) experiments on the dead animal bodies, which date to the early nineteenth century, are generally considered to be the primary inspirations of Shelley in assigning Frankenstein, the protagonist of the novel, the mission of reanimating the dead matter in his experiment of creating a monster. As commonly acknowledged, 'galvanism' which means "electricity produced by chemical action" ("Galvanism") fascinates her, and with this fascination, she elaborates the issue of reanimation via electricity in her novel. Matthis Krischell stresses the relationship between galvanism and Shelley's *Frankenstein* as follows:

Galvanic experiments on corpses remained in fashion throughout the first half of the 19th century. ... In an era in which the experimental method was established in the biomedical sciences, the ethical question of what the experimenter should do to dead bodies and living research subjects is raised in Shelley's novel. (20)

In this regard, it would not be wrong to claim that believing in the theoretical possibility of reanimating something dead with Galvani's theory of 'animal electricity,' Shelley created a character who attempts to give life to a bunch of dead body parts in her novel. Thus, making use of technological devices to control electrical current and expecting to animate an inanimate human body in the early nineteenth century are analysed within the context of the posthuman ideals.

In addition to galvanism, the scientific motivations behind creating a new being also indicate a posthumanist dream for they emphasise decentralising the conventional concept of human for the sake of creating a posthuman being. In this vein, the science

applied in the novel reflects the means of achieving a posthuman body. Moreover, the direction of science which leads man to a state of creating a new being in the nineteenth century can be deduced from Sir Humphry Davy's (1778-1829) statements:

The composition of the atmosphere, and the properties of the gases, have been ascertained; the phenomena of electricity have been developed; the lightings have been taken from the clouds; and, lastly a new influence have been discovered, which has enabled man to produce from combinations of dead matter effects which were formally occasioned only by animal organs. (qtd. in Otis 143)

As indicated, nineteenth-century science provided a wide landscape for humans to surpass their limits. These opportunities can also be interpreted as the means of achieving the posthuman state.

In the literary sense, Mary Shelley's Frankenstein is one of the primary examples concerning the contributions of nineteenth-century scientific developments to the formation of the posthuman state as the novel explores the concept within these contexts. Although the posthuman state refers to transcending the limits of human beings by achieving a higher self, in the novel, it is emphasised that this state turns into the emergence of a monstrous being instead. Therefore, the novel provides an area of study to explore the concept of monster in posthumanist sense. In the novel, the posthumanism lies in Victor's desire to create a new species superior to an ordinary being. However, this pursuit ends up with the creation of an ugly and nonhuman being. Although this being also reflects posthuman bodily features, because of his uncanniness he is ascribed as a monster. He is alienated and rejected by Victor and by society because of his appearance and, as a result, he turns into a real evil, a real monster. For this reason, his posthuman state becomes the primary reason for his being identified as a monster. The irony lies in the fact that, while the posthuman being is expected to be superior to the ordinary man, these posthuman characteristics are the main factors that make the society and his creator qualify him as a monster.

However, beyond the aspect of monstrosity, the scientific practices that Victor applies in creating the monster shed light on the nineteenth-century scientific context. Since these practices are the methods used in the posthuman creation process as narrated in the novel, they stand as an example of how this theory existed in the early nineteenth century in the ideological sense. Thus, the concept of the monster in the novel not only presents an ideological approach to the posthumanism theory but also points out that certain scientific activities and motivations that prompt Victor to create a new being indicate posthumanist ideology. That is to say, under the subject of monstrosity, the novel actually brings together certain nineteenth-century scientific practices, such as galvanism and dissection, with the posthumanism theory. In this sense, just as Stevenson's Hyde character stands for the concept of monster in the nineteenth-century scientific context, Shelley's monster also points at the scientific context of her period. However, Hyde's monstrosity stems from his degenerate body, while the monstrosity of Frankenstein's creature proceeds from his posthuman condition.

Besides, as scientists, both Victor and Jekyll are driven by the motivations of posthumanism and transhumanism in the ideological sense. Although Victor aims to create a new species and does not seek to reach a more advanced version of his own self, his motivations about science and human enhancement are identified with the idea of transhumanism. However, since the dream of creating a new species leads him to an approach that rejects anthropocentrism, he adopts a more posthumanist perspective in this creation process. On the other hand, Stevenson's Jekyll has transhumanist characteristics because he believes that human beings can enhance through science, and with this belief, he makes himself an object of his scientific experiment. Since Hyde is a character that Jekyll wants to get rid of to reach a more sterile and sublime self by separating him from his essence, the medical intervention that he applies to his own body for this purpose reflects the transhumanistic ideals. Nevertheless, Jekyll's experiment also projects the notion of acknowledging the relationality of the species, which is one of the primary arguements of posthumanism. Jekyll comes to such a state of enlightenment when he identifies his repressed urges with animalistic and primitive characteristics. In this sense, Jekyll's transhumanist attempts are basically a result of a posthumanist recognition.

Thus, Mary Shelley's Frankenstein and Robert Louis Stevenson's The Strange Case of Dr. Jekyll and Mr. Hyde are examined in this thesis to demonstrate how the scientific developments of the periods in which they were written correspond to the ideological base of the posthuman thought. Since these two novels are the two outstanding literary examples of how science treats human concept, they provide a great insight into the scientific developments of the time and the relationship between science and human. Therefore, with this analysis, it is proven that, although in these novels the concept of human is harvested within the scientific contexts that they were written, they also reflect essential arguments of posthumanism in the sense of the motivations they contain. In this sense, the nineteenth-century scientific context actually sheds light beyond its time and contributes to the formation of posthumanist thought.

Although the scientific developments of the periods when these works were written correspond to many areas and many dimensions, these novels reflect the most important developments of their periods. For Frankenstein, these can be summarised as galvanism, making experiments on dead bodies and attempts of reanimation. On the other hand, the basic scientific elements involved in The Strange Case of Dr. Jekyll and Mr. Hyde are Darwin's theory of evolution and the degeneration theory with which it is merged. Thus, these novels are not only examined in the light of these scientific developments but also in the sense of how these developments handle the human and monster concepts in relation to each other. As the theme of monstrosity is the common element in both novels, this theme is explored within the framework of the nineteenthcentury sciences and posthuman theory. In this thesis, the main arguments of posthumanism theory are shown by examining the motivations of Victor and Jekyll in their forming new entities. The primary aspects that prove Victor's and Jekyll's posthumanist approach are that they adopt an anti-anthropocentric approach in defining human and that they recognise the relationality of the species. Thus these aspects are analysed in their attempt of creating new subjects. Nevertheless, transhumanism is applied in the sense of achieving a better self through technological or scientific interventions and also its relationship with the Darwinian theory of evolution.

These topics are discussed respectively, and in the first chapter Mary Shelley's Frankenstein is analysed and revealed that the scientific developments of the period overlap with the motivations of posthumanism theory. Moreover, it is also emphasised that this posthuman entity turns into a failure for both his creator and for himself. The reasons for this failure and its relationship with the posthuman state are thoroughly discussed. While examining the posthuman subject, the posthuman subject is considered as the embodiment of multiplicity of species. Furthermore, it is also stated that the monster in the novel, which is the product of posthumanist thought, is uncanny and alienated and for this reason, his posthuman state transforms him into a real monster. In the second chapter, Stevenson's The Strange Case of Dr. Jekyll and Mr. Hyde is thoroughly examined within the primary frames of the theory of evolution and its concomitant degeneration theory. However, in addition to degeneration, the major focus is the aspect of how the theme of degeneracy merges with monstrosity. In the chapter, more emphasis is given to the character of Hyde, primarily by focusing on his degenerate body and monstrous traits. Through this focus, it is proven that these two issues can be evaluated together and that the novel exemplifies the unity of degeneration theory and monstrosity in one character. Though Hyde is the main subject in the general part of the chapter, the aspects that position Jekyll to the state of a transhumanist doctor are also projected in the chapter.

CHAPTER I

A POSTHUMANIST SCIENTIST AND A POSTHUMAN MONSTER IN MARY SHELLEY'S FRANKENSTEIN

"I began the creation of a human being."

-- Mary Shelley *Frankenstein*

Asserted by Victor Frankenstein, the protagonist, the quotation given above is a striking summary of the major emphasis explored in Mary Shelley's (1797-1851) novel *Frankenstein* (1831⁷), which is human creation. As an outcast and challenging work, the novel is widely considered to be an example of the gothic novel and science fiction. Brian Aldiss describes it as "the origin of species", namely, as the progenitor of science fiction novels. (29). As science fiction, it warns about the potential dangers that might emerge as a consequence of misdirection in the scientific pursuits. As put by Michael Mulkay, science fiction novels "operate as crude, yet memorable reminders of the everpresent possibility that scientists, by the very nature of their activities, may get things disastrously wrong and that ordinary people may suffer as result" (159). In the same vein, the novel explores how scientific intrusion into nature creates a monster whose existence poses a threat to the normative human and prompts a necessity of reconsidering the human concept. In addition to this, another major issue emphasised in the novel is the obscurity of what the monster is and if the monster in the novel can be categorised as an ordinary human being in conventional sense.

Many of the literary analyses made on the novel up until today focus on the nineteenth-century concept of human and how this concept is registered at that time and which motivations influenced Shelley to write about a monster and his creator. However, many characteristics of the monster also match with the contemporary representations of posthuman, which projects a state beyond human as a term, since the monster in the novel not only comes unnaturally into earth but also cannot adapt to the society and

_

⁷ Though the first edition of the novel was published in 1818, it was revised and republished in 1831.

struggles with his being the uncanny, weird and the unwanted in this society. As mentioned, posthuman stands for the very condition of an undefinable state in between human and nonhuman. It also stands for the embodiment of multispecies existence in its very constitution (Braidotti, *The Posthuman* 49). The ambiguity which stems from posthuman condition can be observed in the monster that Victor creates throughout the novel. The uncanniness in the appearance of the posthuman subject also points the characteristics of monsters as they both cannot be categorised. Within this scope, the novel explores monstrosity as the outcome of posthuman nature.

The novel, is one of the primary works studied under the posthumanism theory considering the motivations of Victor in making a new species. However, it also reflects that the elements of monstrosity merge with the ambiguity and the uncanniness of the posthuman subject created out of Victor's science. Moreover, the drives and motivations behind Victor's creation of the monster reflect posthumanist dreams and the nineteenth-century idea of progression and enhancement through scientific practices. Thus, while the process of the monster's creation sheds light on the nineteenth-century scientific practices and motivations, these may also be regarded as reflections of the posthumanist thought in the nineteenth-century context. Thus, the major aim of this chapter is to analyse Shelley's Frankenstein within the framework of the nineteenthcentury scientific practices and posthuman theory. The primary objective of this analysis is to project how the concepts of human and monster bring the nineteenthcentury scientific practices and posthumanism theory together and how the posthuman being is considered to be the uncanny, the monster. For this reason, in examining the novel, the nineteenth-century scientific practices such as galvanism, dissection and ideas about science and man's relationship are analysed in conjunction with the posthumanism theory.

The novel primarily deals with the aspect of creation where the protagonist plays the role of God and gives life to a monster by challenging the authority of Him. With regard to the God-like creation aspect emphasised in the novel, *Frankenstein* is widely associated with certain mythological stories like Prometheus, Pandora's Box and with the tragic play of Goethe's *Faust*. Nevertheless, as the name of the novel suggests, the

mythological story of Prometheus is the main source of inspiration in terms of the thematic and symbolic elements projected in the novel. Ted Peters explains the story of Prometheus as follows:

First, Prometheus created the human race, forming our ancestors out of clay. Second, he stole fire from the sun and gave fire to us creatures living on an otherwise dark and damp Earth. Prometheus' gift of fire led to human advance in writing, mathematics, agriculture, medicine, and science. But this theft violated the sanctity of the heavens overseen by the Olympian god, Zeus. In anger, Zeus retaliated by chaining Prometheus to a rock. The imprisoned Prometheus helplessly endured the indignity and pain of having an eagle, the symbol of Zeus, daily eat his liver. For trespassing against the sanctity of the divine realm, Prometheus was punished by the gods. (145)

As stated, Prometheus's hubris and giving human the competencies of the gods resulted in his own defeat. Victor's creating a monster, and consequently becoming a slave to this monster, is often associated with this story and considered to be a result of playing God by overstepping human limits.

Considering the challenging subject of creation in Shelley's novel, George Levine notes as follows:

In her secularization of the creation myth [Shelley] invented a metaphor that was irresistible to the culture as a whole ... the attempt to discover in matter what we had previously attributed to spirit, the bestowing on matter (or history, or society, or nature) the values once given to God. (7)

As demonstrated, the creation subject is challenging for it endeavors to find an issue in what was ascribed to soul, and God. Some scholars analyse this attempt to create a being within the feminist context, especially focusing on the absence of female in making a new being.⁸ However, in the novel, the creation issue points at a dream of

-

⁸ Among these, Ellen Cronan Rose argues that although the novel reveals the story of a mad scientist and his monster, the monster's birth without a female company is a significant aspect to focus on since it disregards the feminine role in the human creation process (50). Moreover, it is also suggested that since Victor as the sole parent does not possess the quality of a caregiver, "the inherent nurturing qualities usually accredited to women", he fails to make his creation a complete human being but instead creates a

overcoming human limits and making something superior to human through reanimating dead body parts utilising science and technology. This is the point where the subject of creating a monster denotes to the theory of posthumanism.

The subject of monstrosity was common throughout the nineteenth century, since at the period the grotesque and anomaly for Romanticism "initiated a cultural revaluation of monstrosity in all its structures" (Gill 211). Romanticism, as an intellectual movement, characterised the ideological and philosophical approaches of the period between 1800 and 1850 and reinforced the individualism rather than reason in constructing scientific knowledge. This individualistic tendency influenced the literary genres, especially in terms of the major themes that they harvested at the period. The Romanticism promoted a new kind of literati that has moved to fiction and offered authors an opportunity to endeavour their literary fantasies namely, "ghosts, ancient decayed castles, the last melancholy descendants of once great families, practitioners of mesmerism and occult sciences, falling and Levantine pirates" (Russell 618). Thus it is observed that Shelley was inspired by the literary fantasies of Romanticism in creating a monster.

Shelley also makes use of the scientific and Gothic elements of the late eighteenth-century and early nineteenth-century periods in writing her novel and the combination of these elements are observed primarily in the process of creating the monster. In the novel, Victor practices dark science and suffers from the adverse consequences of it. Regarding this, Sara Wasson claims that the novel "is a paradigmatic text of medical ambition gone wrong" (1). Victor creates his monster out of different body parts and calls him an "animal," which is supposed to be "as complex and wonderful as men" (Shelley 42). Through creating his monster by using human and animal body parts, Victor unveils certain questions about the definition of human and animal along with their relationship with each other. In this quest, he makes use of scientific innovations of the period like galvanism. The use of galvanism in the creation of the monster and his physical difference raise questions about what a human being is. On the other hand,

monster (Morrison 113). Anne K. Mellor also demonstrates that the monstrosity of the creature is a result of the absence of mother figure asserting that "[t]he genuine improvement of the species can result only from the conjunction of male and female sexuality. In trying to have a baby without a woman, Victor Frankenstein has failed to give his child the mothering and nurturing it requires" (*Mary* 101).

'monster' has many implications originating from "the Latin 'monere,' it means to warn, and 'demonstrare,' to show or make visible" (Botting 142). As a matter of fact, the monster is considered to pose a threat to society throughout the novel. At this point, however, it is important why the monster is considered to be as such. Since he can neither be defined as fully human or nonhuman, he is ascribed as a monster throughout the novel. In this sense, the creation of the monster blurs the definition of human, in fact, it rather brings it into question.

Influenced by her husband's and Lord Byron's conversations on science and technology and their practice on the human body, Mary Shelley made use of the knowledge she gathered from them in her writing⁹ (Caldwell 25). Moreover, she was also inspired by the scientific developments occurred in her period, especially the theory of evolution on the biological construction of human body which primarily argues that the human body has a similar structure with the animal body. Not only the idea of evolution but also the scientific experiments made on plants and animals triggered Shelley to write the story of Frankenstein and his monster. Concerning the aspect of creating a monster whose body is comprised of different human and animal bodies, Shelley explains her scientific inspiration as below:

They talked of the experiments of Dr. Darwin ... who preserved a piece of vermicelli in a glass case, till by some extraordinary means, it began to move with voluntary motion. Not thus, after all, would life be given. Perhaps a corpse would be reanimated; galvanism had given token of such things: perhaps the component parts of a creature might be manufactured, brought together, and endued with vital warmth. (Shelley 4)

Clearly, Erasmus Darwin's scientific analysis on vermicelli lays the groundwork for Shelley to apply the idea of life-giving to something that is inanimate. In the novel,

enthusiasm about writing a striking story as follows:

_

⁹ Shelley explains her motivations in writing the novel in her introduction to the novel. It is noted that the novel was written in a rainy and dark night in Switzerland where Mary Shelley, her husband Percy Bysshe Shelley, Claire Claremont and Lord Byron decide to write ghost stories to accompany the darkness of the night (Shelley 2-3). They decide to make a competition and Shelley expresses her

I busied myself *to think of a story* – a story to rival those which had excited us to this task. One which would speak to the mysterious fears of our nature, and awaken thrilling horror – one to make the reader dread to look round, to curdle the blood and quiken the beatings of the heart. If I did not accomplish these things, my ghost story would be unworthy of its name. I thought and pondered – vainly. (Shelley 3)

Frankenstein gathers limbs and organs of many humans and animals together to make his monster, and although all these are taken from dead bodies, when they come together, they form a living body.

Initially, the primary objective that prompts Victor to create a new being stems from his curiosity about human nature. He seeks for an answer about the structure of life and how it proceeds in the human body as narrated in the novel: "one of the phenomena which had peculiarly attracted my attention was the structure of the human frame, and indeed any animal endued with life" (Shelley 41). Moreover, Frankenstein's enthusiasm for dead bodies and how death occurs in living beings is also another motivation for him. He makes use of dead bodies as materials to form the creature: "I collected bones from charnel houses; and disturbed, with profane fingers, the tremendous secrets of the human frame" (Shelley 43). The relationship between birth and death is symbolically presented through the materials used in his experiment since the combination of dead materials constitutes the living monster. Considering this combination, Victor claims that "[t]o examine the causes of life, we must first have recourse to death ... [for] bestowing animation upon lifeless matter" (Shelley 41). In his experiment, Victor makes use of the scientific and biological knowledge of the period; therefore, the novel is considered to be "the governing myth of modern biology" (Turney 3).

As mentioned in the introduction, Galvani's experiments on the dead animal bodies in the early nineteenth century become an inspiration for Shelley to assign Frankenstein the mission of employing galvanism in his experiment of creating a monster. Certain implications prove that Victor applies electricity in making a new species in the novel. Victor states that "I collected the instruments of life around me, that I might infuse a spark of being into the lifeless thing that lay at my feet ... it breathed hard, and a convulsive motion agitated its limbs" (Shelley 45). The "spark of being" indicates an application of electricity according to many scholars, but for many, it also indicates the use of battery. Among these, Marilyn Butler suggests that "Frankenstein's 'instruments of life' capable of infusing the 'spark of being' suggest the galvanic battery used in real life to try to bring a poisoned cat or hanged criminal back to life" (xxx). Andrew Smith, on the other hand, emphasises the experiments of Sir Humphry Davy (1778-1829) and

how they are related to the electricity applied in Shelley's *Frankenstein*. He claims that Dayv's experiments on electricity enabled him to claim that "chemical affinities were related to electrical powers and that elements could be identified in electrochemical terms," and thus, the application of electricity "seem to be tangential to the type of science conducted by Frankenstein" (Smith 71).

Considering the aspect of electricity, it is stated that Adam Walker's (1731-1821) lectures considering the relationship between the electricity and life inspires Percy Bysshe Shelley in his writings and that Mary Shelley was familiar with the scientific knowledge of her husband (Mellor, *Mary* 103). In this regard, Walker's ideas about electricity and animation can be considered one of the inspirations within the scientific context of the novel. Walker explains the power of electricity claiming that "[i]ts power of exciting muscular motion in apparently dead animals, as well as of increasing the growth, invigorating the stamina, and reviving diseased vegetation, prove its relationship or affinity to the living principle" (qtd. in Mellor, *Mary* 103). Although Shelley does not directly give any clue about her inspiration in the novel, in the "Author's Introduction," she states that "[p]erhaps a corpse would be reanimated; galvanism had given token of such things" (Shelley 4).

What is significant considering the application of electricity in creating a being is that it becomes the means of achieving the posthuman body. Peter Mahon also evaluates the use of electricity within that perspective and refers to it as "the actual science and technology that made the conception of Victor's Posthuman Creature possible" (142). In this regard, the notion of reanimating a dead being via electricity indicates the science and technology that Victor applies in his creation of the posthuman monster. In addition to this, with this galvanic practice, Victor descends man to the same level as animal and makes them both test objects. This degradation aspect corresponds to the anti-anthropocentric approach of posthumanism since posthumanism criticises the human-centered approach in understanding life. However, electricity is not the only thing that benefits to reach the posthuman. Posthuman thought, which suggests that the human body is constituted by many other bodies (Wolfe, *What is* xxv) also finds its

place in the scientific context of the period in which the novel was written, namely, in the dissection practices.

At the period, not only animals but also humans were subjected to scientific experiments already before the novel was published. The Murder Act of 1752 legalised the dissection of the criminals for medical purposes though many scientists were hesitant about the practice (Turney 22). However, collecting bones from the charnel houses or graves for the sake of scientific experiment was quite common until the Anatomy Act of 1832 which legalised dissecting dead bodies of the unclaimed poor people and the dead of the charitable hospitals (Mitchell et al. 92). According to historian Jonathan Sawdey (1956-), this practice of taking the body into pieces for medical and scientific purposes was identified as the "culture of dissection" which ultimately refashioned "the means by which people made sense of the world around them" (ix). In other words, to explore the human body with this practice of dissection paved the way of learning human in every dimension.

Regarding this practice and its relationship with literature, Deborah Blum asserts that due to the doctors's practices of dissection on human bodies many people believed that resurrection of the dead might be possible. She also claims that attributing such mission of working on human anatomy to the major character of the novel has evidential value in proving that Shelley was influenced by the scientific and philosophical developments of her time and transmitted this inspiration to her writing ("Deborah Blum"). In other words, Shelley was influenced by this practice, and ultimately refashioned unearthing the knowledge about body via the experiment of Victor in her novel. Shelley reflects this desire of learning about the body in the words of Frankenstein: "I became acquainted with the science of anatomy, but this was not sufficient; I must also observe the natural decay and corruption of the human body" (Shelley 41).

Within nineteenth-century scientific context, focusing on human anatomy and giving life to a dead matter via electricity urged man to pursue surpassing the limits of both human and nature and the reflections of this are observed in the novel. Among the scientific figures of the period, Sir Humphry Davy (1778-1829) in his *Discourse*,

Introductory to a Course of Lectures on Chemistry (1802) stresses how science opened new worlds to men as follows:

Science has given to him an acquaintance with the different relations of the parts of the external world; and more than that it has bestowed upon him powers which maybe almost called creative; which have enabled him to modify and change the beings surrounding him, and by his experiments to interrogate nature with power, not simply as a scholar ... but rather as a master, active with his own instruments. (qtd. in Otis 142)

As stated, scientific experiments and researches allowed man to practice his creative ideas on nature through which he could 'modify,' 'change' and even distort nature. Embracing the role of being a master, Victor also interrogates nature and creates a monster out of unnatural means. His instruments become the dead bodies that he picks from the charnel houses. His motivation emerges during his school years, as he pursues to find the elixir of life as an enthusiastic student. He states his enthusiasm as follows: "Under the guidance of my new preceptors I entered with the greatest diligence into the search of the philosopher's stone and the elixir of life; but the latter soon obtained my undivided attention" (Shelley 32). The same philosophical approach concerning the human intrusion into nature is observed in posthuman approach.

The ideas that bring together dissection practices and posthuman thought are based on two foundations: firstly, these practices coincide with the rejection of anthropocentric perspective, as they degrade human into a test object, secondly, as a result of these practices, it is intended to form a new species from the combination of human and animal bodies. Examining the life process of many animals and humans, Frankenstein makes use of corpses and lifeless human and animal body parts in creating his monster. Consequently, the monster turns out to be a hybrid creature whose body is comprised of multiple human and animal bodies collected from "the unhallowed damps of the grave" and "the slaughterhouse" (Shelley 43). Clearly, in this creation, Victor subverts the natural order of human embodiment which appeals to and widely interests the human concept in the nineteenth century. Victor's venture also explains how human-animal hybridity is explored within the posthuman monstrosity. According to Rosi Braidotti, a monster stands for "a shifter, a vehicle that constructs a web of interconnected and yet

potentially contradictory discourses about his or her embodied self ... a process without a stable object" ("Signs of" 150). In other words, the instability stems from the confusion about the monster's body, which represents contradictory discourses. This contradictoriness corresponds to the human-animal hybridity, which constitutes the body of the monster.

Considering this, Lucile Desblache notes that "[i]n the many hybrid objects of desire produced and offered in our societies, animals tend to be used as exotic and aesthetic accessories emphasising the power of human control and of the mechanics developed by human intelligence" (248). As suggested, the animal is used as an object to reinforce the human authority and human intelligence over the hybrid being. However, to mix human and animal body parts with the intention of creating a perfect being reflects the opposite of this view in the novel, since Victor believes that such a combination will result in the birth of a perfect being who is supposed to be "wonderful as human" (Shelley 42). According to Anne K. Mellor, by creating his monster with a bunch of animal and human body parts, Victor demeans his creature in the physical sense since the outcome is not fully human and it consequently violates the sexual selection in the evolutionary process ("Making" 18). In other words, Victor's experiment to create a being with animal and human body parts both dehumanises and bestialises the creature. He mixes these body parts intending to create a new and superior entity, which however collapses the unity and integrity of a human body. In this regard, it would not be wrong to assume that he undermines human integrity and acknowledges that the body is comprised of multiple other bodies. This idea refers to an approach that forms the basis of posthumanism theory.

As demonstrated in the introduction, decentralisation of the human in identifying all the species is the essential argument of posthumanism, for which the concept brings a new approach to the conventional concept of human. In the same vein, with regard to the body's composition, Donna Haraway suggests that human body is comprised of human and bacterial genomes and underlines its necessity asserting that "[t]o be one is always to become with many" (*When 4*). As Haraway considers the unity of many in the cellular level, her suggestion displays an acknowledgment about how the human body is

comprised of interspecies cooperation. Moreover, she dissents the idea of "human exceptionalism" and the premise, which suggests that "humanity alone is not a spatial and temporal web of interspecies dependencies" (*When* 11). She rejects the anthropocentric perspective and suggests multiplicity in both human integrity and human's relationship with the environment. In a similar manner, Victor also recognises that human is always in interaction with external factors and living and non-living materials. Even more, he sheds light on the notion that human is constructed in conjunction with them, for which he uses lots of human and animal body parts in creating the monster. Therefore, he is a scientist who embraces the concept of human in posthumanist sense for he acknowledges the multiplicity of beings in the human body.

Another significant point regarding the concept of human is that Victor's creation of 'new species' challenges the order of nature since Victor stands for the means of selection rather than random natural selection. As the monster is a synthetic and artificial being created by an unknown scientific practice, it seems to be evaluated in a transhumanist context. However, these practices are not used to enhance a human's capacity but to create a new entity. Thus, the motivations and technics such as the galvanism or animal electricity behind creating a new species, display a dream of creating a posthuman being rather than a transhuman. Similarly, Andy Mousley also states that both Victor and his monster display features that might ascribe them posthuman. She claims that "[b]orn as it is of a 'human' desire to overcome his humanity, Frankenstein is thus a posthuman human,' a human who refuses to live within the boundaries of the human" (Mousley 162). It is inferred from the statement that it is his will to overcome humanity that makes Victor closer to posthuman.

Nevertheless, believing that he can heal human beings and end the illnesses, Victor still challenges normative creation process by interrupting it with science and technology. This pursuit is narrated in the novel in his goal to "banish disease from the human frame and render man invulnerable to any but a violent death" (Shelley 33). If this pursuit is considered independent from the monster creation aspect, Victor can be regarded as a transhumanist because he believes that technological and scientific application can enhance man. Regarding transhumanist ideals, Patrick D. Hopkins states that it aims to

"permit human bodies and brains to catch up with the human mind's projects, to fulfil the human desire for its own idealized construction and pursuits" (3). It stems from the desire to transform into something better, something morally and physically ideal version of our current being. In the same vein, an eminent transhumanist, Nick Bostrom, determines the 'transhuman' as the embodiment of the next step in the human evolution by which human will be able to enhance life span, get better health and overcome the biological limits with technological application ("Transhumanist" 2). Accordingly, since human applies the technology to enhance his nature, the means of this next step in the evolutionary process will be via human hand. In a similar vein, Stefan L. Sorgner and Nichola Grimm suggest that "human selection" rather than the natural selection might be the next step of the human evolution process (11). Accordingly, Victor's pursuit of advancing and developing human corresponds to the transhumanist notion of human enhancement by employing science and technology to humans.

Though in sociological level, the monster cannot be categorised as an ordinary human being, his biological nature unveils certain scientific ideas of the nineteenth century period. Among these, Rudolf Virchow's (1821-1902) scientific studies on the cellular level provide an insight into understanding the human creation issue explored in the novel on the medical level. As J. Walter Wilson asserts, Virchow's contribution unveiled that "life is a continuum handed on from cell to cell, from organism to organism, from species to species" (qtd. in Otis 164-5). Although Virchow was born after the publication of Shelley's Frankenstein, the motivations behind Victor's making his monster match with Virchow's argument about the interconnection between the body materials. In addition to this, acknowledging that the novel generally lacks the "the clinical idiom", Jürgen Meyer states that Victor's experiment was clinically impossible, though he also asserts that the "fibres" that Victor mentions corresponds to the 'tissue' that Xavier Bichat (1771-1802) explores as the 'basic building blocks' that construct human anatomy in his Anatomie Generale (1801-1802) (177). Expecting that dead bones might form a living body when united, Victor states that he gets all the materials that he needs for the body from the graves and yards which indicates that he makes use of dead human and animal body parts in this creation. Though there are contrasting views considering Frankenstein's science, Randy O. Wayne states that

Frankenstein's experiment displays an example of "materialistic/mechanical" view which according to her acknowledges that "there is a unity of nature and a continuum between the non-living and living – and all things whether living or not are made of the same material" (5). Accordingly, it would not be wrong to deduce that the view of interdependence of the individual existences to form a body influences Frankenstein in creating his monster.

However, while Shelley attributes the mission of making an experiment by human body parts to Victor, she might intendedly imply that violating the ethical rules in scientific experimentations on human body might have fatal consequences and this failure is associated with the transhumanist dreams. Victor aims to surpass the boundaries to make something beyond human, and by this, he desires to be superior to the other humans, to be a creator. Obviously, there lies hubris in his desire to overcome himself. Inspired by the lecturer M. Krempe, Victor's enthusiasm grows, for Krempe acknowledges that scientists surpass their limits:

They penetrate into the recesses of nature, and show how she works in her hiding-places. They ascend into the heavens; they have discovered how the blood circulates, and the nature of the air we breathe. They have acquired new and almost unlimited powers; they can command the thunders in heaven, mimic the earthquake, and even mock the invisible world with its own shadows. (Shelley 38)

As demonstrated, scientists think that they have no limit, and they have the power to manipulate nature. Though Krempe does not directly encourage Victor, his words prompt certain thoughts on Victor: "So much has been done, exclaimed the soul of Frankenstein—more, far more, will I achieve; treading in the steps already marked, I will pioneer a new way, explore unknown powers, and unfold to the world the deepest mysteries of creation" (Shelley 38). Frankenstein yearns for following the direction of these scientists. His enthusiasm can be explained as a transhumanist dream since many transhumanists believe that science and technology will transcend humans into their better versions. As put by Stephen Herbrechter, "[i]n 'trans-humanist' circles there even has been sheer delight at the prospect that these new technoscientific developments might transform us in a not too distant future into a new digital species with fantastic

new potential (cf. Hans Moravec, Max Moore, Vernor Vinge and their followers)" (*Posthumanism* viii). This pursuit, however, ends up with a catastrophy since this new being murders Victor's family and becomes Victor's doom. In this respect, the main factors that make the beast so devilish are the oddities in his creation and his exclusion from society. However, aside from his odd and uncanny appearance, the main factor that triggers the monstrous nature within him is his being rejected by Victor.

Regarding this, the most striking and intriguing part of the novel is where the 'birth' of the monster takes place since this section poses questions about the human concept under the posthuman frame due to the unnatural emergence and obscure appearance of the beast. In the section, Victor confides his horror while the monster comes to life as follows:

I saw the dull yellow eye of the creature open; it breathed hard, and a convulsive motion agitated the limbs. How can I describe my emotions at this catastrophe, or how delineate the wretch whom which infinite pains and care I had endeavoured to from? His limbs were in proportion, and I had selected his features as beautiful. Beautiful! - Great God! His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was lustrous black and flowing; his teeth of pearly whiteness; but these luxuriances only formed a more horrid contrast with his watery eyes that seemed almost of the same colour as the dun-white sockets in which they were set, his shrivelled complexion and straight black lips. (Shelley 45)

Frustrated by the appearance of his creature, which was supposed to be better than an ordinary human being, Victor dispossesses the creature from human subjectivity and does not give him a name. Behind his frustration about the appearance of the monster, there lies a contrast between the posthuman artificiality and the conventional concept of beauty. In posthumanist sense, the body of the monster is created artificially and thus it violates the traditional idea of beauty. Thus, his artificial nature is in contradiction with anything conventional. This contradiction stems from the posthuman notion, which states that "[h]uman bodies have no boundaries" (Pepperell, "The Posthuman" 3). As stated in the quotation, from the complexion to the colour of the eyes and teeth, the proportions on the monster's face are in great contrast with the great harmony of the sensory organs on the face of an ordinary person. In this sense, the proportions of the

monster's face are not equivalent to the standard human face proportions according to the quotation above.

Another significant aspect concerning the concept of beauty and Victor's frustration about monster's appearance is that the monster's body consists of dead body parts and for this reason, his existence as a living being stands for a challenge against death. In the article "Posthuman Body and Beauty" it is stated that "[b]eauty has always been seen as an antidote to death, a remedy to the anguish of the ephemeral, but if death is overcome in other ways, beauty no longer makes sense" (Russo and Stefano 462). That is to say, to overcome death in any way makes the concept of beauty superfluous. Thus, Victor's frustration with the appearance of the creature involves a dilemma. This dilemma stems from the fact that Victor expects the beast he creates by combining dead artefacts with completely artificial methods to be beautiful in the traditional sense. According to these inferences, posthuman perspective indicates the end of the conventionally accepted concept of beauty, and this could be observed in Victor's frustration about the monster's appearance. Eventually, Victor cannot characterise the monster as a human being, neither can he attribute him a name.

As for Victor's rejection of acknowledging the monster a subjectivity, there lies a concern of losing the authority over his creation, namely that though Victor aims to create a perfect being, he is also afraid of the power and will of this new-born artificial being. Jean Baudrillard explains this concern in technological sense and asserts that human beings desire to create perfect technological advancements that do not need human intrusion but avoid to accord a will to these, namely to the computers or robots, etc. (39-40). In other words, though humans aim to enhance the capacities of machines to decrease human effort, they abstain from letting them control humans. The monster does not entirely match with what Baudrillard asserts. However, as Victor aims to create an advanced being that will evaporate diseases, he makes use of scientific and technological means of his period. Although the monster is not a technological product, he is an artificial entity created out of an unknown science. Baudrillard emphasises that to grant a will to the artificial beings would be "the perfect crime" since it would displace man's superior position on earth, instead, man leaves imperfections or namely

the traces that show man's sign on earth (40). Sharing the same concerns that Baudrillard demonstrates, Victor deprives the monster of being a subject. In other words, he does not grant this artificial creation an identity for he is concerned about leaving no trace of himself behind. Therefore, from the moment the creature first opens his eyes to the world, it remains nameless throughout the novel, which also divests him of being a part of the human society.

The monster is deprived of subjectivity since Victor believes that his "unearthly ugliness rendered it almost too horrible for human eyes" (Shelley 77) and thus he should be kept away from the society. According to Rosi Braidotti, posthuman state "raises crucial ethical and conceptual questions about the status of the human but it is generally reluctant to undertake a full study of their implications for a theory of subjectivity" (The Posthuman 39). In the same vein, Victor does not raise a particular explanation for the creature's personality and subjectivity, instead, he alienates him. In order, a person to be considered as an individual, he is expected to be acknowledged as part of society. In this regard, the monster cannot be categorised as an individual within this frame. Though Victor recognises that the creature has an identity and a mind as the story progresses, until he reaches a state of awareness, he calls the creature "a thing": "I might infuse a spark of being into the lifeless thing that lay at my feet" (Shelley 45). He refers to the creature as if he is a collection of a bunch of lifeless materials instead of a living being. Victor cannot assume that the creature is a living entity with a mind of his own but an object since he calls him "it" instead of "he" and he approaches him with a bias in his mind questioning whether his task is accomplished or failed. Furthermore, Victor identifies him as a monster for his evil look and describes him as such in their first encounter: "I beheld the wretch – the miserable monster whom I had created. He held up the curtain of the bed; and his eyes, if eyes they may be called, were fixed on me" (Shelley 46). In effect, Victor fails to treat his subject as an autonomous being and ignores the fact that he has a right to live as he wishes. Instead, he leaves him behind all alone and lets the monster's character and life be shaped by the external forces which eventually alienate, reject and demonise him. In relation to this, Gary Harrison and William L. Gannon note that Victor fails to obey certain ethical rules like considering "creature's autonomy, vulnerability, and welfare" (1139), instead, captured by his

scientific passion, "he lose[s] sight of his work's horizon—its potential risks and unintended consequence" (1157). As a result, monstrous actions of the creature stem from alienation and demonization. In other words, since Victor does not acknowledge him as an individual, he inevitably lets the monster be labelled as such.

Moreover, by leaving the monster behind, Victor does not only violate moral and ethical values about the scientific subject but also the border between sanity and scientific pursuit. Victor admits his fallacy confiding:

If the study to which you apply yourself has a tendency to weaken your affections and to destroy your taste for those simple pleasures in which no alloy can possibly mix, then that study is certainly unlawful, that is to say, not befitting the human mind". (Shelley 44)

As reported, he criticises himself because of his excessive scientific greed and also because of ignoring the necessity of constructing a balance between science and his life. Accordingly, Victor's failure stems from his transhumanist ideals, namely what Ted Peters calls the "transhumanist confidence" for it "draws upon a utopian vision, a vision of future human fulfilment or even posthuman fulfilment in a kingdom where rational intelligence has transcended its previous biological imprisonment" (147).

While on the one hand, the monster turns into an object of torture for Victor, on the other hand, it is uncovered that he creates something even better than himself as at the very beginning of creating the monster; he desires this creature to be superior to human. These kinds of characteristics match with the twenty-first-century notion of posthuman as Robert Pepperell suggests, "[p]osthumans will be persons of unprecedented physical intellectual and physiological ability, self-programming and self-defining, potentially immortal, unlimited individuals" (*The Posthuman* 170). This state of being "unlimited" is traced in the bodily formation of the monster in the novel. Robert Walton describes him as "a being which had the shape of man, but apparently of gigantic stature" (Shelley 20). In addition to his oversize, he is also depicted as a being with superior physical features as the monster himself confides:

I was not even of the same nature as man. I was more agile than they and could subsist upon coarser diet; I bore the extremes of heat and cold with less injury to my frame; my stature far exceeded theirs. When I looked around I saw and heard of none like me. Was I, then, a monster, a blot upon the earth, from which all men fled and whom all men disowned? (Shelley 93)

It is clear from this quotation that the monster acknowledges how he is different from the ordinary man and how his monstrous appearance makes him the other and rejected. Although his bodily formation makes him the alienated, it also displays that "he can safely be ascribed to a different species," namely a posthuman since he surpasses the capacities of an ordinary being (Carretero-González 58). Though Victor pursues to create a beautiful being, worthy of admiration, it ends up with a gigantic horrifying figure for which he feels troubled in getting the creature into a category especially. He confides his astonishment about the sight of the creature that "even Dante could not have conceived" (Shelley 46). Victor argues that even Dante, who envisioned many different creatures and monsters, cannot envision the monster and put him into a category. Accordingly, it would not be wrong to argue that the outward appearance of the monster is what makes him different from the other people and one of the most apparent reasons for his being ascribed as a monster. Thus, Victor's identifying the monster as such stems from a category crisis and as term monster corresponds to what Cohen characterises as the "third term" (6). In other words, it defines the undefinable and unexplainable. Stefan Herbrechter explains the posthuman monster claiming that "because of its ambiguity and hybridity the monster represents a category crisis" (Posthumanism 88). Within the context of the novel, the monster cannot be defined as a human but as a monster because of his hybrid nature. He expresses how he is different and ugly compared to Victor, claiming, "my form is a filthy type of yours, more horrid even from the very resemblance" (Shelley 100).

This ugliness, stemming from his hybrid nature, attributes a state of uncanniness to the monster as Lucile Desblache stresses "[l]iving' hybrids, whether cloned or bred naturally ... can generate fear and a sense of the uncanny" (248). In this respect, his

¹⁰ Victor refers to various monsters and horrifying figures that Dante encounters in his travel to the levels of hell in his Divine Comedy (1320).

hybrid body, which evokes a sense of fear is the major reason for his being regarded as a monster. With regard to this, Judith Halberstam argues that the body plays a crucial role in constructing one's identity. She states that "our layered bodies – bodies of many surfaces – while of beauty and value to those who co-construct us intersubjectively – become for others a landscape of gendered and sexual fear, vilification, and violence" (qtd. in Jones and Harris 525). Notably, she focuses on the subjects of the 'co-construct' as they are the primary variants in shaping one's identity. Since the monster's body is a patchwork of many different human and animal bodies and also identities, he seems horrendous. Thus, it would not be wrong to infer this uncanny body does not correspond to the ordinary human concept, but the concept of monster.

No matter how he tries to adapt himself to the society by learning the people and their culture, he eventually recognises his difference from the ordinary men. He concedes this recognition of his monstrosity and difference from other people as follows:

I had admired the perfect forms of my cottagers — their grace, beauty, and delicate complexions; but how was I terrified when I viewed myself in a transparent pool! At first I started back, unable to believe that it was indeed I who was reflected in the mirror; and when I became fully convinced that I was in reality the monster that I am, I was filled with the bitterest sensations of despondence and mortification. (Shelley 88)

As reported, the monster sees his distinction from the other people and pities himself. Considering the relationship between the being different and monstrous, it is stated that: [t]he fear of difference leads humanity to treat people of different skin colour, beliefs or even food habits as monsters (Nayar, "Our Monsters" 8). In order him to be accepted as a part of the society, the monster requires to be associated, to be familiar with the rest of the people. Concerning this necessity, Maureen N. McLane argues as follows:

As both Foucault and Frangois Jacob note, species was defined in this era according to the persistence of the visible structure. For the creature, to be "of the same species" is to look alike, however "deformed and horrible" that might be. Species here seems to follow a logic of appearance. ... Creatures of different species will "not associate" together. Aesthetic revulsion precludes social interaction. This has been repeatedly

demonstrated by the visual paranoia the monster induces and the semiological riddle he presents. (975)

McLane is expressing that the plain idea of being some sort of species depends upon appearing similar, which also indicates that the unfamiliar ones are excluded from the definition and description of that species. In other words, if beings are not similar, they do not belong the same species and if they are not the same species, it is not possible for the different ones to unite with the similar ones in one community. Elizabeth A. Wilson on the other hand, stresses the significance of the social construction of the body notion and notes that "[t]he body ... is curiously abiological—its social, cultural, experiential, or psychical construction having been posited against or beyond any putative biological claims" (15). Both the lack of familiarity that McLane notes and the lack of a socially constructed body notion that Wilson states are found in the nature of the monster. The monster's unfamiliarity and his exclusion from the definition of human species are assured by Victor and the other people that monster encounters since they alienate him because of his horrifying appearance. Instead, he evokes fear in humans though he aims to communicate with people and create an emotional bond. As the monster is alienated by the society, he cannot achieve to have a proper definition for his kind. Although his body is made of human parts mostly, he does not have a chance to be a subject of the "social," "cultural" or "experiential" realms of the society that Wilson notes. Consequently, his posthuman nature becomes the primary reason for his being considered as a monster. In that sense, the monster reveals what is the 'other' in the society.

Nevertheless, he tries to adapt himself to the language and lifestyle that the society uses to feel belong to this society. The monster realises the behavioural similarities between the farm people and their relationship with each other like a baby learns from the very beginning. The language that they share functions as a tool to make them a community and it is an essential element that makes them one kind of a species: human. He recognises the use of language and observes that people communicate by sharing "their experience and feelings to one another by articulate sounds" (Shelley 86). Clearly, the language functions as the primary element that distinguishes humans from the rest of

the species. Considering what makes humans unique, Otfried Höffe stresses the significance of communication and network tools like language as follows:

One can certainly explain that which makes human beings unique by first studying the characteristic features of their animal nature and from there move on to language, self-consciousness and reason, and hence to what interests us here: freedom of action and moral abilities. (38)

As demonstrated, the combination of language acquirement, consciousness and logic is essential to be a human. However, the monster cannot achieve such a state for he lacks the guide who teaches him these. Considering this lack, Felice Cimatti focuses on the impossibility of becoming human without the guidance of a human community in his analysis of the novel. He notes as follows:

A body becomes human when confronted with a preexisting human (and linguistic) community. For this reason, every form of specific human activity—like language learning—that claims to be self-sufficient, seems to be destined to fail. (12)

Cimatti stresses the significance of a shared communication tool: language, which is the essential element that makes humans one kind of a species. For the case of the monster, othered and isolated from the society, to communicate with the other people is quite unlikely. His attempts to create such bond with the cottagers are repulsed, which proves that he cannot be like one of those people. This is proved in the section where the monster tries to communicate with the cottagers and attacked by them in response:

I had hardly placed my foot within the door before the children shrieked, and one of the women fainted. The whole village was roused; some fled, some attacked me, until, grievously bruised by stones and many other kinds of missile weapons, I escaped to the open country and fearfully took refuge in a low hovel, quite bare, and making a wretched appearance after the palaces I had beheld in the village. (Shelley 82)

Though he is rejected in such a cruel manner, the monster does not despair and still seeks for hope from the De Lacey family which he closely pries. He aims to "convince them that monstrosity is only skin deep" (Youngquist 54). He sets out to prove that to

the family and expects them to be affectionate, but he is more severely pushed back than before and attacked by them.

Aside from the rejection of the society, the primary factor that demonizes the monster is being rejected and despised by its creator Victor. Being in the state of the monster's father, even Victor does not want to put the monster into a human category and communicate with him like a person. Thus, all his evil deeds are directed to Victor since he aims to take revenge from him. Although Victor's brother, William affronts the monster shouting at him: "[u]gly wretch! You wish to eat me and tear me to pieces. You are an ogre" (Shelley 109), this does not trigger him to kill the child:

As I fixed my eyes on the child, I saw something glittering on his breast. I took it; it was a portrait of a most lovely woman. In spite of my malignity, it softened and attracted me. For a few moments I gazed with delight on her dark eyes, fringed by deep lashes, and her lovely lips; but presently my rage returned; I remembered that I was forever deprived of the delights that such beautiful creatures could bestow and that she whose resemblance I contemplated would, in regarding me, have changed that air of divine benignity to one expressive of disgust and affright. (Shelley 110)

It is clear that the monster harms this child who abuses him only because of his relationship with Victor. Therefore, the major reason behind the monster's gruesome murder is not the result of his evil nature but, Victor's rejection and despise. In other words, the monster does not have an ill morality in his essence; on the contrary, he has a sympathetic approach to the people as he desires to live away from the people in order not to frighten them.

For this reason, although the monster seems horrific because of his physical features, he has a superior morality. Margarita Carretero-González states that the diet and the lifestyle that monster aims to follow is similar to the life of Adam and Eve in the Garden of Eden before the Fall, which displays that the monster prefers innocence over power (57). The section is narrated in the novel with the monster's words as such: "My food is not that of man. I do not destroy the lamb and the kid to glut my appetite; acorns and berries afford me sufficient nourishment" (Shelley 112). As stated, the monster

pursues to follow a vegan diet that makes him morally superior to humans. Nevertheless, behind all these traits and pursuits, there lies a concern of social acceptance. The monster tries to humanize himself in order to be familiar and feel belong to somewhere. However, the features that accredit posthumanity to the monster are not limited to moral aspects but include intellectual superiority as well.

His characteristic traits and all the murders that he cleverly commits display that his intellect matches with what Nick Bostrom calls "superintelligence" which is used "to refer to intellects that greatly outperform the best current human minds across many very general cognitive domains" (Superintelligence 52). When it is considered that the monster learns how human life proceeds in a much shorter period than an ordinary human being, their language, their history, the geography of the world, etc. it does not surprise that he commits three murders without leaving any clue behind. Furthermore, the innocent Justine becomes the victim of the monster's cunningly designed plan, and she becomes the one blamed for murdering William, Victor's brother. Another indicator of the monster's super intellect is observed in the section when the monster kills Henry Clerval and makes it look like Victor's murder. These traits underline the fact that the monster has enhanced physical, moral and intellectual capacity for which he inevitably challenges his maker's authority. Behind this, however, lies the composition of his artificial nature.

In creating the monster, Victor makes use of "synthetic-biology" which as Henk van den Belt notes "shifts or blurs the boundaries between matter and information, life and non-life, nature and artifact, organic and inorganic, Creator and creature, the evolved and the designed" (259). In other words, the synthetic nature of the monster stands for the very essence of his being beyond an ordinary being. Even more, this very essence blurs his artificiality and brings him closer to the place of his creator. As the story progresses, the hierarchical status of Victor and his monster changes and consequently, as Victor himself states, he is "the slave" to the monster, not the "master" (Shelley 164). This change of roles is observed at the end of the novel when they both seek revenge from each other. Knowing that Victor's physical capacity is not strong enough to

survive in harsh weather conditions, the monster makes Victor follow after him and notes the following:

Follow me; I seek the everlasting ices of the north where you will feel the misery of cold and frost, to which I am impassive. You will find near this place, if you follow not too tardily, a dead hare; eat and be refreshed. Come on, my enemy; we have yet to wrestle for our lives, but many hard and miserable hours must you endure until that period shall arrive. (Shelley 156)

He clearly declares his mastership over his creator and directs the way of taking revenge. The super intellect of the monster paves the way for the misery of Victor, and day by day he loses his strength and finally ends up in Robert Walton's ship, weak and almost dead.

All physical and moral features that make him both distinct and superior prove that he is a different species: a posthuman subject "whose basic capacities so radically exceed those of present humans as to no longer be unambiguously human by our current standards" (qtd. in Wolfe What is, xiii). By creating the monster, Victor challenges the constructed standard definition of man, and rather he makes a being which "signals the end of a certain conception of the human" (Hayles 286). However, although these characteristics match with the notion of posthuman, the idea of creating a better intellect is already a part of the nineteenth-century science and philosophy. In this regard, Samuel Butler's assertions about human and machine interaction and the philosophy behind making machines to surpass the human intellect in his Erewhon matches with Victor's creating a monster with the aim of creating a being by "select[ing] his features as beautiful" (Shelley 45). In Butler's novel, to create machines that will dethrone human and his authority is criticised as follows:

Are we not ourselves creating our successors in the supremacy of earth? daily adding to the beauty and delicacy of their organization, daily giving them greater skill and supplying more and more of that self-regulating self-acting power which will be better than intellect? (S. Butler 146-147)

Clear from this statement that machines pose a threat to human authority with their enhanced capacities. In relation to this, Joseph Campbell makes an analogy between the rise of machines against human and rise of monster in *Frankenstein*, in his words "as the man in the old stories revolts against gods, so does the machine revolts against the people in *Erewhon*; and so does Dr. Frankenstein's creature" (144-145). Therefore, apart from the pursuit of surpassing human intellect, by creating a monster, Victor enslaves himself to the monster he creates which is quite similar to Butler's machine and human interaction where human beings are enslaved by machines. However, initially, the monster does not aim to enslave his creator but to be accepted by him and the rest of the people.

Victor has a significant role in the monster's life since he undertakes the role of the society in shaping the identity of the monster and undertakes the role of being a parent to him and shaping his identity. Tamise van Pelt states this relationship between the mother/caretaker and the baby stating that "decentered from an ideal ego whose unattainable image of perfection the child narcissistically wishes to find reflected by others, especially the mother" (59). In the case of the novel, Victor takes on the role of mother/caretaker since he creates the monster, but he does not justify an identity for the monster; he rather sees him as an uncanny, weird and undefinable thing and thus causes his deprivation of social acceptance or an identity. Regarding this deprivation, Felice Cimatti states as follows:

Victor Frankenstein's refusal to recognize "his" creature condemns the nameless "monster" to be a humanoid body without identity. This is the dialectic "fuel" of Frankenstein: the desire on the part of the "monster" to be recognized by its reluctant "father." (13)

Victor's ruthless attempt to make a human being without considering the fact that he will have his own mind is considered to be a failure or a deficiency according to many of the theoricians of the posthuman. Thus, Victor fails to be an embracing and loving parent to the monster and confides that "unable to endure the aspect of the being I had created, I rushed out of the room and continued a long time traversing my bedchamber, unable to compose my mind to sleep" (Shelley 45). Victor fails in many aspects

throughout the novel, and his failure becomes the reason for his doom. However, there lies a significant reason behind all that he suffers, which is that his monster appears to be smarter than an ordinary human being. Although he wishes for a loving parent and to be accepted by people, he only feels alienation and rejection.

Identity is defined as "the fact of being who or what a person or thing is" ("Identity"). Apart from that, certain aspects like gender, family and nationality along with the physical and personal features characterise one's identity. The ones who have no ancestry cannot fit the definition of an individual concerning the familial identity. For example, a person is commonly associated with his/her father and mother. Since Victor, as the creator of the monster, does not accept the monster, the monster suffers from the lack of family bond. He expresses his situation in the novel as "no father had watched my infant days, no mother had blessed with smiles and caresses." (Shelley 94) As he is deprived of the sense of being someone's son, the monster seeks for a family bond like the one in De Lacey family. He could only be able to experience affection and love as an observer. When he finds shelter and starts to observe how people communicate by listening to their language and discerning the love affinities with each other, he becomes aware of his loneliness and isolation. After peeking at the family for a long period, he decides to come out with a strong desire to be accepted as a part of their cosy family. Nonetheless, it ends up with failure because of the monster's horrifying appearance.

Dealing with the monster's search for an identity in the society throughout the novel, Shelley questions whether the concept of being human is assumed by birth or acquired in a longer process, namely by being accepted by the society that one lives in. With regard to this question, it is stated that "Mary Shelley saw the creature as potentially monstrous, but she never suggested that he was other than fully human" (Mellor, *Mary* 63). The monster and his identity search throughout the novel proves that Victor's attempt to make a complete human being is a failure as at the beginning, he aims to subdue nature with his experiment to create life. In the beginning, Victor ventures to create a human being with the question of if "the principles of life proceed?" (Shelley 41). Elaine L. Graham expresses Victor's attempt to violate nature and question the definition of the human as follows:

Certainly Victor's interventions have violated the boundaries between death and life, artificial and natural, made and born; and as the object of his intentions, the creature breaches the rules of natality as a condition of what it means to be human(e). (83)

In a sense, Graham stresses that by creating the monster, Victor challenges the rules of nature, and the monster becomes the object of this challenging pursuit. As this pursuit prompts certain questions about the meaning of human, these questions also rise to the surface with the creation of monster; as stated by Cohen, "[t]he monsters asks us how we perceive the world, how we have misrepresented what we have attempted to place. ... They ask us why we have created them" (20). Condemning his creator for making him such a monstrous being that everyone is afraid of, the monster in the novel asks these questions to Victor:

Accursed creator! Why did you form a monster so hideous that even you turned from me in disgust? God, in pity, made man beautiful and alluring, after his own image; but my form is a filthy type of yours, more horrid even from the very resemblance. (Shelley 100)

From the very beginning of his life and through the end of the story, the monster seeks for a kind of social acceptance and sympathy; he even asks for a female company from Victor for himself to unite with. However, Victor rejects his wish believing that it will be a disaster. He almost begs Victor for a female company as follows:

I swear to you, by the earth which I inhabit, and by you who made me, that with the companion you bestow I will quit the neighbourhood of man, and dwell, as it may chance, in the most savage of places. My evil passions will have fled, for I shall meet with sympathy! My life will flow quietly away, and in my dying moments I shall not curse my maker. (Shelley 113)

The monster's wish reflects his pursuit of being identified with someone like himself, and for the sake of such a company, he promises to stay away from society. He seeks for a subject that mirrors his creation process and his being, in order him to be content with his meaning in life and to belong to somewhere. According to Maureen N. McLane, the monster's request for a female company to understand his being displays "his experience of sympathy as a specifically *human* specular logic [since] a body

requires a common appearance to stimulate, elicit and participate in human sympathetic reactions" (111).

Moreover, as he is aware of his state in the society as a horrible and outcast being, the monster believes that he can unite with another being like himself and then with this union he will not have concerns like social acceptance. Thus he utters that "I am alone, and miserable; man will not associate with me; but one as deformed and horrible as myself would not deny herself to me" (Shelley 111). Being conscious of the fact that an ordinary female would avoid him for his being the outcast and uncanny, the monster believes that a female like himself would also be one of her kind and she will not have any other option but to unite with him. For this reason, he believes that a female company would constrain him from being evil, and then consequently he will achieve the state of a "human being in perfection [that] preserve a calm and peaceful mind, and never to allow passion or transitory desire to disturb his tranquillity" (Shelley 44). Apart from staying away from people and not causing a threat against them, he also expresses his desire to pursue an unsophisticated way of living as follows:

My companion will be of the same nature as myself, and will be content with the same fare. We shall make our bed of dried leaves; the sun will shine on us as on man, and will ripen our food. The picture I present to you is peaceful and human, and you must feel that you could deny it only in the wantonness of power and cruelty. Pitiless as you have been towards me, I now see compassion in your eyes. (Shelley 112)

No matter how secure and natural picture the monster offers to Victor, he fails to persuade him, since to create a new female creature for the monster to unite with and the idea of their potential offspring would devastate Victor. Even though Victor promises to make a female company and even begins making a female company for the monster, he decides not to finish it fearing "she might become ten thousand times more malignant than her mate" (Shelley 126) and tears the pieces of this new female. His withdrawal can be explained as the fear of the future controlled by posthuman beings. Considering this fear, Daryl J. Wennemann argues that "[a]gain while there may be a break between the human and the posthuman, there is also discernible continuity inasmuch as we can identify the new posthuman being over against the human" (18). In

other words, since the generation of posthuman might put human under threat, Victor breaks his promise. In the same vein, Pramod K. Nayar also states that "[m]ore than monsters, we fear monsters reproducing, and populating the earth, maybe challenging humanity" ("Our Monsters" 8). In other words, the possibility of the monster's mating and multiplication, and the possible threats that his generation might pose against humanity are more horrifying than the monster. This rejection leads the monster to devote himself to destroy Victor's life:

Shall each man ... find a wife for his bosom, and each beast have his mate, and I be alone? I had feelings of affection and they were requited by detestation and scorn. Man! you may hate; but beware your hours will pass in dread and misery, and soon the bolt will fall which must ravish from your happiness for ever. Are you to be happy while I grovel in the intensity of my wretchedness? You can blast my other passions; but revenge remains — revenge, henceforth dearer than light or food! I may die; but first you, my tyrant and tormentor, shall curse the sun that gazes on your misery. (Shelley 128-9)

Thus, it would not be wrong to argue that initially the physical aspects ascribe a monstrosity to the creature; however, in time the monster turns into a monster in real sense, as both Victor and society reject him because of his physical appearance. In the novel, the monster kills three people due to the lack of sense of belonging to somewhere or someone since even Victor does not accept and acknowledge him as a separate and unique being. In this regard, his body plays a significant role in his turning into a monster.

Analysing the philosophical models within the evolutionary biology, Elizabeth Grosz notes that "we need to understand the body, not as an organism or entity in itself, but as a system, or series of open-ended systems, functioning within other huge systems it cannot control through which it can access and acquire its abilities and capacities." (3) Clearly, Grosz underlines the significance of considering all the constituents that form the body in understanding it. Similarly, Karen Barad also puts emphasis on the aspect of "intra-activity" through which she argues that everything matters and being is accomplished by the thing's or matter's actions (815). In other words, she underlines the mutual connection between a being and all the variants in the construction of this being.

She further indicates that "[b]odies are not objects with inherent boundaries and properties; they are material-discursive phenomena" (823). In other words, she gives agency to the body to perform and accomplish its being. In the novel, both evolutionary philosophy that Grosz emphasises and the agential power given to the body that Barad states could be observed. Since his monstrous appearance prompts certain feelings like fear and anxiety on the people that he encounters, this situation creates an irony with the intention of Victor. Initially, he is supposed to be a being better than an ordinary human, and his posthuman nature becomes the very reason for his alienation from the society because people consider him as a weird creature that they cannot define and attack him. As a result, the evil and vengeful deeds rise to the surface and make him a real monster.

He recognises his alienation from the society since he cannot associate himself with the other beings and he questions his own being with the words below:

As I read, however, I applied much personally to my own feelings and condition. I found myself similar yet at the same time strangely unlike to the beings concerning whom I read and to whose conversation I was a listener. I sympathized with and partly understood them, but I was unformed in mind; I was dependent on none and related to none. 'The path of my departure was free,' and there was none to lament my annihilation. My person was hideous and my stature gigantic. What did this mean? Who was I? What was I? Whence did I come? What was my destination? These questions continually recurred, but I was unable to solve them. (Shelley 99)

Though the monster does not belong to the human community, he questions the very state of human and his own place in the world. Although he cannot associate himself with any of these and considers himself as "dependent" and "related to none," he figures out the reason why he is not as they are. He considers himself as an outsider mostly because of his extraordinary appearance and observes other people compulsorily from a distance, which again excludes him from their union and the very essence of what they are. Society, and especially Victor, do not accept the monster as a regular human being. The monster indeed proves that he is beyond an ordinary human state. Since he can survive in the wild nature without the aid of any human or animal, it shows that his body is competent enough to adapt into harsh living conditions which proves his

superior bodily construction and thus superior human state. Knowing that he is self-sufficient and thus superior to his creator, the monster calls out to Victor that "You are my creator, but I am your master" (Shelley 128). The process that a monster experiences until turning into a vengeful and evil being is explained with the following statement:

Monsters ... tend to function as warnings or admonitions of one sort of another. They function as uncanny doubles of our societies, reflecting back to us images of everything that we have cast out as undesirable or threatening to the status quo, and forcing us to face that which we would prefer to leave hidden. (Heiland 100)

What the monster experiences throughout the story and what shapes his identity and behavioural tendencies are constructed by the society's approach to him. The murderous tendencies of the monster in this vein are the reflections of how society treats him. In other words, these traits that characterise him as the monster are the threatening images that society wants to cast away.

Consequently, as explained above, Victor desires to overcome his humanity to surpass the boundaries and limitations by creating the monster, and this pursuit makes him closer to a transhumanist scientist. However, since at the beginning he aims to create a new species, his progeny becomes a posthuman. In this attempt, certain nineteenthcentury scientific elements, practices and ideas are seen merged with the pursuit of creating a new and superior being, a posthuman being. In this regard, while the novel sheds light to scientific practices of the period within the context of the human creation aspect, these practices also point at the core arguments of posthumanism theory since they stand for the means of this goal. Thus, as these statements emphasise, the results validate the argument that this chapter initially aimed to demonstrate. The monster's creation process which happens through artificial means displays that such an experiment is a result of the nineteenth-century scientific phenomena like galvanism and dissection. In other words, regarding their attitude to human and animal, these practices are in line with the philosophical basis of the posthuman approach. In this regard, the monster's monstrosity in the novel displays certain characteristic features that match with both periods and perspectives.

Moreover, particular practices also stand for the way of achieving the posthuman to the nineteenth-century scientific objectives in terms of creating a being that exceeds human capacities. Since posthumanism refers to a state beyond human, the monster who is created out of these sciences, suits this definition. This state includes his body formation, his animalistic bodily features that make him stronger than an ordinary human being and his super intellect. Evidently, these features emerge as a result of an unknown science in his artificial body, which does not conform to the beauty concept in the conventional sense for which he is regarded as a monster. However, his artificial nature which is composed of human and animal body parts forms a new species, a posthuman since "this entity which is no longer an animal but not yet fully a machine, is the icon of the posthuman condition" (Braidotti, *The Posthuman* 74).

CHAPTER II

A TRANSHUMANIST SCIENTIST AND A DEGENERATE MONSTER IN ROBERT LOUIS STEVENSON'S THE STRANGE CASE OF DR. JEKYLL AND MR. HYDE

We must, however, acknowledge, as it seems to me, that man with all his noble qualities ... still bears in his bodily frame the indelible stamp of his lowly origin.

-- Darwin The Descent of Man

Robert Louis Stevenson's (1850-1894) The Strange Case of Dr. Jekyll and Mr. Hyde (1886) is one of the most outstanding examples of the debate on human evolution and enhancement for it deals with how the primitive origin hidden in human beings creates a contrast with the norms and expectations of a society and how this contrast is explored as an example of degeneration. Throughout the novel, there is a continual switch between the animalistic past and modern human in the evolutionary sense, and this process occurs via the transformation of Jekyll into his primitive origin: Hyde. The novel explores certain ideas about posthumanism theory, which could be observed in the protagonist, Dr. Jekyll's acknowledgement about the animality inherent in his nature and in his aim to surpass this primitive and animal side to achieve a state of sublimity. Moreover, the novel also reflects transhumanist ideals in terms of the drives that urge Jekyll to transmute his body by means of medication. While Jekyll's transmutation into Hyde proceeds in the reverse direction and represents his degenerate body, it also establishes certain monstrous indications both physically and behaviourally. Thus, although the major motivations of posthumanism and transhumanism appear in Jekyll, an undefinable deformation is observed in Hyde's primitive body, which can be regarded as an emblem of monstrosity.

According to many scholars, Stevenson's novel is one of the most prominent novels of Victorian fiction which deals with the dual nature of human. Apart from these, the novel

was also studied as an example of primitivism and degeneration in the evolutionary sense by many scholars. 11 As for its difference from the other studies, in this chapter, Hyde's degenerate nature is examined as the very essential element of his being a monster. On the other hand, certain motivations that urge Jekyll to transmute into Hyde are studied within the framework of posthumanism and transhumanism. While the evolutionary concept manifests in the form of 'devolution,' and is commonly associated with degeneration in Hyde's body, this degeneration also indicates certain monstrous traits for which Hyde is analysed both within the degeneration theory in relation to evolutionary perspective and the monster theory. Representing the transhumanist scientist who surpasses human limits with this experiment, Jekyll is analysed within the framework of transhumanism movement and posthumanism theory. In this regard, the novel explores the human concept in two contrasting bodies in which one displays the degeneracy and monstrosity and the other, the transhumanist ideals. Therefore, the major aim of this chapter is to analyze the novel within the context of the relationship between the theme of monster and degeneration theory and the posthumanist and transhumanist motivations behind the emergence of monster. In this chapter, firstly the features that make Hyde both degenerate and monstrous are emphasized, and then Jekyll's transhumanist and posthumanist motivations are discussed. However, before the novel is examined in these contexts, a brief information is given about the previous studies on the novel.

With the growing interest in psychology in the nineteenth century, it was widely considered that duality of Hyde and Jekyll stands for the psychological disunity and was associated with certain concepts like "split-personality", "multiple personality disorder"

1

¹¹For example, Stephen D. Arata evaluates Hyde as a representation of atavistic criminal. Jekyll's transformation is generally considered to be suggestive of a fear from the possible threats if evolution goes in the reverse direction. He also lays emphasis on the rise of "professional man" in the nineteenth century and Hyde's transformation into a respectable man within the context. Different from the common interpretations that focus on Jekyll's turning into Hyde, Arata focuses on Hyde's transforming into a gentle and respectable man like Jekyll and evaluates this as an emblem of professionalism (39).

This fear of degeneration was associated with the fear from the "primitive" and "savage" people who were considered to be a threat to the European people within the discourse of colonialism. (M. Keith Booker and Anne-Marie Thomas 324). Judith Halberstam claims that degeneration as embodied by Hyde reflects the ills of the period since his deformed being confuses the unity of body and mind in Victorian sense (77-78). She stresses that all these concerns behind Jekyll's turning into Hyde stem from "a popular concern with infectious diseases such as syphilis and tuberculosis... and a post-Darwinian fear that evolution may be reversible, that, indeed, degeneration was both the symptom and the illness of the age" (Halberstam 78).

and "plurality of human consciousness" (Buzwell). Thus, the switching process from Jekyll to Hyde in the novel served as a model for these disorders within the medical context. Considering the psychological aspect behind this duality, Michael Davis also states that "[i]n Stevenson's story, an analogous, albeit much darker, fluidity is in evidence at the centre of identity, a fluidity which, subsequently, conceals at least two-and perhaps many-selves" (213). This point concerns the question of whether the author was influenced by the studies conducted in the field of psychology when the novel was written. On account of this, the author's wife states that "my husband was deeply impressed by a paper he read in French scientific journal on sub-consciousness" (qtd. in Stiles 879).

Anne Stiles explores the characteristics of Jekyll and Hyde and makes a connection between their behavioural traits and the hemispheres of brain. Stiles suggests that while Jekyll stands for the rational left hemisphere, Hyde stands for the emotional and savage right hemisphere and claims that multiple or split personalities as represented by Jekyll and Hyde are associated with the duality of the brain which emerges as a result of "hemisphere imbalance" (884-86). In the light of this theory, the "abnormal and misbegotten" essence of Mr. Hyde creates a contrast with the "well-made, smooth faced" (Stevenson 60, 21) Jekyll. This contrast, according to Stiles demonstrates that "Jekyll represents the pinnacle of evolution, while Hyde approaches its nadir¹²" (884). In this regard, the continual shift between the rational Jekyll and the irrational and emotional Hyde might reflect the domination struggle between the savage and civilised nature of man. Similar to Stiles, Anne Herington also claims that "one would have to argue ... that Jekyll would tend to focus his personality in the civilised, rational left hemisphere, while Hyde would give vent to his criminal instincts from somewhere in the recess of the uneducated, evolutionary backward right hemisphere" (136). As stated, the madness and animality of Mr. Hyde are associated with human's evolutionary backward and uncivilised side, whereas rationality and dignity of Dr. Jekyll are associated with the evolved and the developed side of human beings.

_

¹² The term refers to "the lowest or most unsuccessful point in a situation" ("Nadir").

By attributing both primitive and civilised characteristics into one person, Stevenson in the novel points at this duality inherent in the essence of human as narrated in the novel by Jekyll's words: "I learned to recognise the thorough and primitive duality of man: I saw that of the two natures that contended in the field of my consciousness, even if I could rightly be said to be either, it was only because I was radically both" (Stevenson 65). Regarding this, it is stated that the evil side is considered to be the suppressed and in order to form the civilised man, these two personalities should be united, as put by Daryl Koehn "[c]ivilization progresses and our tastes mature when we draw on the resources and energy of our imaginative and suppressed selves" (95). He also suggests an anti-essentialist approach to the good and evil sides and argues that the society makes Hyde evil since the society's overreaction against Hyde stems from their awareness of the fact that he embodies the "sinful desires" that are hidden in their psyche (Koehn 98). On the other hand, this duality, according to some scholars stands for the femininity and masculinity contrast and also collaboration. Among these scholars, Sara Schoch considers the monstrous Hyde as the embodiment of the demonising woman figure who poses a threat to the society and associates this threat with the rise of the New Woman movement¹³ (10).

On the other hand, the issue of split identity is also considered to be circulated around the morality of the characters; one the respectable and trustworthy Dr. Jekyll, and the other as the freak and devilish Mr. Hyde. Considering this, it is stated that Stevenson by this story "defined, for more than a century, an assumption that divisions in human consciousness are inevitably moral" (Gish 59). However, Stevenson projects that these two poles are not entirely separate from each other, but instead, they are the very inseparable components of human nature by attributing such contrast characteristics to one character in the novel. Therefore, it would not be wrong to assume that the author implies one should not be afraid of the evil outside but the evil within him/herself. As stated by Terry Eagleton, "[h]ell is not other people ... It is exactly the opposite. It is being stuck for all eternity with the most dreary, unspeakably monotonous company of

_

¹³ New Woman movement emerged as a reaction against the social and traditional barriers that prevent women from gaining the rights and opportunities given to men in the late nineteenth century. Considering the movement, it is stated that "[p]articipants in this phase... were interested in gaining greater access to education, employment and economic and civic rights and in changing expectations concerning personal behavior" (Cruea 198-199).

all: oneself' (22). According to this approach, since Jekyll is more and more absorbed in his will for evil and his evil side gives both torment and pleasure, this notion of evil within human nature could be considered as the primary issue of the novel. He expresses this duality confiding: "[w]ith every day and from both sides of my intelligence, the moral and intellectual, I thus drew steadily to that truth by whose partial discovery I have been doomed to such a dreadful shipwreck: that man is not truly one, but truly two" (Stevenson 65).

In the novel, Mr. Hyde is depicted as a monster that comes out of a mutation as an alien body. Nevertheless, his monstrosity does not merely emerge from his alienation but also from his degenerate body and immoral actions that stem from this degeneracy. The novel primarily depicts the story of a passionate doctor, Jekyll, who tries to physically separate his primitive and evil side which is embodied by Mr. Hyde. Throughout the novel, Jekyll with his transformations into Hyde switches between the evolutionary past and his current modern body. This struggle between the primitive and civilised stems from the survival concerns for these two entities share one body and try to survive within it. This battle is projected in such a way that it is an inevitable natural phenomenon. In other words, in the evolutionary sense, they represent the embodiment of what Darwin calls the "struggle for existence" (*On the Origin* 97).

According to Darwin, this struggle among the species is the most essential drive within the "natural selection" for the continuation of the future generations. Clearly, for Jekyll and Hyde, this continuous fight for the preservation of their own bodies and personalities is essential within the concept of natural selection. In support of this view, Wietske Smeele also evaluates this personality switch between Jekyll and Hyde stating that "these moments are constantly in flux, and their constant conflict with one another reflects the struggle in nature to adapt and thrive in competitive niches" (157). This notion could be seen in the awareness of Jekyll when he desperately dreams of separating his savage side from the civilised. He confides that "these polar twins should be continuously struggling" and also mentions how this clash of domination occurs in two bodies in the words "where Jekyll perhaps might have succumbed, Hyde rose to the importance of the moment" (Stevenson 66, 77).

In this race of dominance, the main factors that leave Hyde behind Jekyll are his primitive and animalistic physical appearance and his villainous and instinctive behaviours which do not suit the concept of a civilised man. Considering the aspects of being a civilised man, Herbert George Wells (1866-1946) provides an insight to the nineteenth-century concept of civilised man in his "Human Evolution, An Artificial Process" and notes that achieving this state depends on two factors:

(1) an inherited factor, the natural man, who is the product of natural selection, the culminating ape, and a type of animal more obstinately unchangeable than any other living creature; and (2) an acquired factor, the artificial man, the highly plastic creature of tradition, suggestion and reasoned thought. (217)

As demonstrated, Wells considers that human beings have dual natures, one is rooted in biology and the other is ensued from the society and traditions. In this regard, the non-civilised and primitive side embedded in human nature is neutralised with intellectual improvement. Nonetheless, in the case of Hyde, his primitive physical look turns into a mask; an "impenetrable mantle" (Stevenson 70) under which Jekyll puts the moral and ethical responsibilities aside and follows his instinctual and evil deeds.

The feelings and pleasures that Jekyll represses in his being is narrated as such: "Many a man would have even blazoned such irregularities as I was guilty of; but from the high views that I had set before me, I regarded and hid them with an almost morbid sense of shame" (Stevenson 64). Clearly, Jekyll represses the turbulences inside him for the sake of the preservation of his dignified identity. The point where he turns a monster in this regard is where he takes the potion and turns into Hyde's body, as in this body, he releases the repressed in him. In support of this view, Richard Kearney claims that monsters stand for the "return of the repressed" (97). Aware of the duality in his nature, Jekyll confides his desire for freedom that he aims to achieve via separating these two personalities as follows:

If each, I told myself, could but be housed in separate identities, life would be relieved of all that was unbearable; the unjust might go this way, delivered from the aspirations an remorse of his more upright twin; and the just could walk steadfastly and securely on his upward path, doing the good things in which he found his pleasure, and no longer exposed to disgrace and penitence by the hands of this extraneous evil. (Stevenson 65-66)

As narrated, Jekyll craves for getting rid of the pressure that his civilised identity imposes upon the non-civilised. As a result of this pressure, he splits these two personalities in two bodies and then wears the body of Hyde as he narrates in the novel he is "accustomed to sleep in the body of Edward Hyde" (Stevenson 71). Martin Danahay asserts that "Stevenson's Jekyll and Hyde is a tale about two bodies and not just two identities" ("Dr. Jekyll's" 37). In point of fact, Jekyll, in his own body lives as a dignified Victorian gentleman, while immediately after mutating into the body of Hyde, he turns into an evil and wild creature. Considering their relationship, it is stated that "Jekyll's desires are created by what cannot be accounted for in this society, leading him to consume more desire more. His desires are ineffable ones, which Hyde fulfils" (Comitini 126). In this vein, the body of Hyde stands for a mask that represses the primitive deeds and ambitions that lie in Jekyll's being, which indicates an emblem of monstrosity. In other words, Jekyll falls into the temptation of primitive manners and he expresses this temptation that he is enslaved to as follows:

Yet I preferred the elderly and discontented doctor, surrounded by friends and cherishing honest hopes; and bade a resolute farewell to the liberty, the comparative youth, the light step, leaping pulses and secret pleasures, that I had enjoyed in the disguise of Hyde. (Stevenson 74)

However, apart from this temptation, certain aspects in Hyde's physical appearance that emanate from his primitive entity strengthen his monstrosity.

In literature, monsters function to display the fragility of the borders between humans and nonhumans (Graham 12) and they are generally depicted as deformed and grotesque in physical sense. They stand for an alternative kind of being to the human subject, obscure and uncanny beings whose incoherent bodies according to Cohen "resist attempts to include them in any systematic structuration" (6). Clearly, monsters cannot be defined within the constructed notions and patterns and are considered as the

embodiments of inconsistency. Though they cannot be categorised within the "systematic structuration" still they bear the elements of nature in their bodies and even more, they come out of nature. Considering their relationship with nature, Margaret Shildrick states that monster is "an instance of nature's startling capacity to produce alien forms within" (10). Hence, though monsters are grotesque in appearance, they are the products of nature and commonly they spring out of nature.

Hence, Hyde's physical appearance is the fundamental factor that proves his monstrosity since he is considered to be uncanny, deformed and undefinable throughout the novel. How Hyde's ambiguous appearance contradicts with Victorian gentleman's demeanor is observed in the description of civilized man as represented by Mr. Utterson and Dr. Jekyll. In this vein, the description of Jekyll's lawyer, Mr. Utterson as narrated at the beginning of the novel stands for an example of a civilised Victorian man:

Mr. Utterson the lawyer was a man of a rugged countenance that was never lighted by a smile; cold, scanty and embarrassed in discourse; backward in sentiment; lean, long, dusty, dreary and yet somehow lovable. At friendly meetings, and when the wine was to his taste, something eminently human beaconed from his eye; something indeed which never found its way into his talk. (Stevenson 5)

These lines display how society defines a respectable Victorian man who has certain qualities like not to smile and talk much and keep a "rugged countenance." As indicated, Mr. Utterson is depicted as a man of dignity who appears to be prudent and cold and whose expressions are generally stable. Although sentimentally devoid of joy or at least devoid of expressing his emotions, he is "somehow lovable" since the society respects the staidness in his manners. Similarly, Dr. Jekyll is also depicted as a dignified and venerable man. As given in the novel, Dr. Jekyll "was a large, well-made, smooth-faced man of fifty, with something of stylish cast perhaps, but every mark of capacity and kindness-you could see by his looks" (Stevenson 21). These descriptions demonstrate that people respect men who pursue a constant reliability and abide by the social restrictions.

On the other hand, Mr. Hyde is depicted with a hideous and evil look which creates a contrast with the constancy of Utterson. When Mr. Enfield mentions his first encounter with Mr. Hyde, he argues that he does not seem like human and depicts his amazement about what he sees uttering that "[i]t wasn't like a man; it was like some damned Juggernaut" (7). This description corresponds to the identification of a monster which is "a large, ugly, and frightening imaginary creature" ("Monster"). Although Hyde is not a gigantic being, he seems to be a frightening and overwhelming force, for he crushes the little girl like a huge and destructive being. Another indicator of Hyde's scary image appears in the section where Jekyll confesses how his looks frightens the driver in Hyde's body. He confides that "I gnashed my teeth upon him with a gust of devilish fury; and the smile withered from his face —happily for him- yet more happily for myself, for in another instant I had certainly dragged him from his perch" (Stevenson 78).

Apart from his terrifying appearance, Hyde has also an undefinable disorder in his appearance. Mr. Enfield's inability to portray Hyde is narrated in the novel as follows:

He is not easy to describe. There is something wrong with his appearance; something displeasing, something downright detestable. I never saw a man I so disliked, and yet I scarce know why. He must be deformed somewhere; he gives a strong feeling of deformity, although I couldn't specify the point. He's an extraordinary-looking man, and yet I really can name nothing out of the way. No, sir; I can make no hand of it; I can't describe him. (Stevenson 10-11)

Clearly, Mr. Enfield fails to portray a proper description of Mr. Hyde and cannot put him into a category though he implies that he is somehow ugly and deformed and gives a sense of dislike. This state of being undefinable inscribes a kind of grotesqueness to Mr. Hyde character, and his indescribable deformity also reflects certain indications of monstrosity as put by Noël Caroll: "[h]orrific creatures seem to be regarded not only as inconceivable but also as unclean and disgusting" (21). The sense of dislike that Enfield mentions corresponds to Caroll's argument. Another evidence of Hyde's inconceivability is seen in Dr. Lenyon's depiction of him: "there was something

_

¹⁴ Juggernaut means "a huge powerful, and overwhelming force or institution" ("Juggernaut").

abnormal and misbegotten in the very essence of the creature that now faced me" (Stevenson 60). Hyde's "misbegotten" nature also shows his "impurity" which is an indication of "the fantastic biologies of horrific monsters" (Caroll 47).

The 'deformity' that Enfield observes in Hyde's body is considered to be an emblem of his being at the back at the evolutionary ladder (DeLong 118) as Hyde reflects certain animalistic traits in terms of his behaviours. In the section where Mr. Utterson comes across with Mr. Hyde for the first time, he observes Hyde's "shrank[ing] back with a hissing intake of the breath" or "snarl[ing] aloud into a savage laugh" (16-17). However, the savagery and animality attributes an ambiguity to the character of Hyde and it stems from the unexplainable deformation in his look. Considering his physical appearance, Mr. Utterson continues to describe him as follows:

Mr. Hyde was pale and dwarfish, he gave an impression of deformity without any nameable malformation, he had a displeasing smile, he had borne himself to the lawyer with a sort of murderous mixture of timidity and boldness, and he spoke with a husky, whispering and somewhat broken voice; all these were points against him, but not all of these together could explain the hitherto unknown disgust, loathing and fear with which Mr. Utterson regarded him. (18)

Clearly, Hyde's look and traits are mysteriously weird although his deformity is inexplicable. Considering the appearance of monsters, Michael Grantham asserts that "[p]hysically, the monster is often depicted as grotesque or hideous. The ugliness of its aesthetic properties solidify its identity as other than human and serves to reinforce its ability to evoke sensations of fear and anxiety" (15). In the novel, Hyde's "displeasing ... down-right detestable" (Stevenson 10) appearance stirs fear and anxiety among all the people he encounters. Utterson also attributes the sensation of fear in the quotation given above.

In the following statements, Mr. Hyde is also depicted as "a person of small stature" (Stevenson 26) which strengthens his dwarfishness as man and indicates his similarity to the earlier form of humans like "Australopithecus [who were] light in frame and relatively short" (O'Neil). His physical features correspond to what Lombroso considers

as the features of a criminal man for "asymmetry is a common characteristic of the criminal physiognomy" (13) and also his dwarfish stature matches with the criminal men who are generally "under medium height" (236). In this vein, while his physical stature could be considered as a degenerate criminal body, these features also attribute him a general ambiguity: "deformity without any nameable malformation" (18) which is associated with the emblems of monstrosity since "[m]onsters inhabit geographies of ambiguity ... [t]heir bodies are intermediate, interstitial, in transition" (Oswald 343).

This ambiguity in his appearance creates a sense of unrest in people that he encounters with throughout the novel for they cannot put him into a category. This state underlines that he is someone outside the system, a monster. Concerning this, Monica Germanà notes that "[t]he discrepancies in the responses all characters in the story have to their vision of Hyde are suggestive of all that is unutterable about Hyde; he is a black hole, a sublime abyss, a missing link in a chain of knowledge" (108-109). The undefinable deformity in his appearance and people's inability to put him into a category makes him monstrous since it does not conform to the structures of the system. According to Cohen monsters are "harbingers of category crisis ... they are disturbing hybrids whose externally incoherent bodies resist attempts to include them in any systematic structuration" (6). In this regard, the deformity in the body of Hyde shows on the one hand that he is a primitive being, on the other hand, this deformity also points to his monster self.

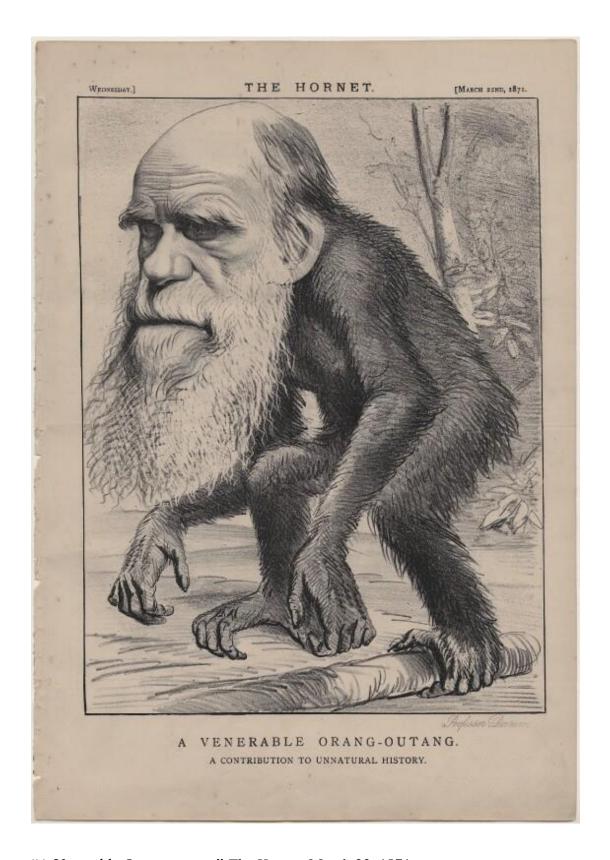
As the story progresses, many animalistic descriptions are attributed to him that supports his being at the atavistic past such as behaving with an "ape-like fury" or being a "masked thing like a monkey jumped from among the chemicals and whipped into the cabinet" (Stevenson 25,49). In the part where Jekyll's servant Poole depicts the creature in Jekyll's room and tries to convince Mr. Utterson that he is not his master (Jekyll), he confides that the man cries out "like a rat" (Stevenson 47). Such traits display that Hyde stands for the ancestor of the modern human in the evolutionary progress. Surprised by what he sees, Mr. Utterson describes Mr. Hyde with amazement in the following sentence: "God bless me, the man seems hardly human!" The description emphasises that the unfamiliar appearance of Hyde shocks Utterson and urges him to believe that he

must be something rather than human. Hyde's nonhuman appearance in this regard is also a sign of his being a monster, since monsters according to Judith Halberstam represent "the negative of human" in a broader sense and they are to "be everything the human is not" (22). Clearly, the unfamiliarity in the look of Hyde is associated with evil-mindedness. Furthermore, Jekyll's servant Poole also calls Hyde a 'thing' and 'it' which displays his confusion in defining what he sees. Poole further contends that: "No, sir, that thing in the mask was never Doctor Jekyll – God knows what it was, but it was never Doctor Jekyll" (47).

Another emblem of Hyde's monstrosity is his in-betweenness since a monster is "neither a total stranger, nor completely familiar: he exists in an in-between zone" (Braidotti "Signs of" 141). This notion could be observed in the reactions of people after seeing Hyde and their inability to explicitly identify him as nonhuman, for he acts both humanlike and nonhuman. Utterson describes Hyde: "the man seems hardly human" but instead he is more like "troglodytic¹⁵ shall we say" (Stevenson 18). Clearly, Utterson resembles him to a primitive or prehistoric human, though he is not able to find a better word in referring to him but "man". Therefore, Hyde's in-betweenness, namely his being another side of Jekyll and his primitive being as himself, is another indicator of his monstrosity.

_

¹⁵ The term is the adjective form of the word 'troglodyte' which is defined as "(especially in prehistoric times) a person who lived in a cave" ("Troglodyte").



"A Venerable Orang-outang." *The Hornet*. March 22, 1871.

The figure shows the depiction of Darwin with a furry and monkey-like primate body published in *The Hornet* magazine in 1871. In the caricature, Darwin's head with his white long beard stands on top of a primate dark-haired body which possesses long arms and apish feet that are able to grasp things. In this caricature, the unity of Darwin's head and the primitive human body is depicted in such a way that it is a mixture of a human and an ape. It would not be wrong to envision "ape-like" Mr. Hyde similar to this depiction as he is the union of a primate form of human body and the modern form of a human body, like in the depiction of Darwin. Apart from this depiction, the description of Mr. Hyde as an atavistic being corresponds to the characterization of the descent of humankind as Darwin states, "man is descended from a hairy quadruped, furnished with a tail and pointed ears" and he further emphasises that these are preceded from an earlier stage following a direct line as he notes, these "derived from an ancient marsupial animal, and this through a long line of diversified forms, either from some reptile-like or some amphibian like creature, and this again from some fish-like animal" (*The Descent* 389).

Mr. Hyde's atavistic depiction manifests in the same vein with the degeneration theory, which primarily bases its argument to the possibility that evolution might go in the reverse direction. Considering the relationship between the theory of evolution and degeneration, David Punter suggests that the theory of evolution "led to the conclusion that if something could evolve it could also devolve or degenerate, whether it were individual, society or nation" (42). Therefore, Mr. Hyde, as an atavistic and animalistic person stands for a bodily degeneration. Max Nordau in his *Degeneration* (1892) defines the concept as follows:

The clearest notion we can form of degeneracy is to regard it as *a morbid deviation from an original type*. This deviation, even if, at the outset, it was ever so slight, contained transmissible elements of such a nature that anyone bearing in him the germs becomes more and more incapable of fulfilling his functions in the world; and mental progress, already checked in his own person, finds itself menaced also in his descendants. (16)

In the light of this statement, the deviation from the original is Mr. Hyde's deviation from Jekyll within the context of the novel as the mental progress does not function in Hyde's mind but instead, he is driven by the instinctual drives coming from his descendants. Different from Nordau, Ray Lankester (1847-1929) identifies the term as a way of adaptation depending on the environmental conditions that a species is exposed to as he suggests in the following lines:

Degeneration may be defined as a gradual change of the structure in which the organism becomes adapted to less varied and less complex conditions of life. ... Any new set of conditions occurring to an animal which render its food and safety very easily attained, seem to lead as a rule to Degeneration. (32-33)

Lankester argues that an organism can evolve into a degenerate form following a reverse direction in the evolutionary ladder if its living conditions do not necessitate to be a complex form. In this regard, what Lankester stresses in terms of degeneration can also be considered as a way of progressive transformation. Still, his perception does not match with the situation of Mr. Hyde or his relationship with his environment, since the society rejects the existence of Mr. Hyde in his atavistic body and considers him as a threat to the order and unity of a civilised society.

Besides, Mr. Hyde's primitive nature does not only stem from his appearance but also his actions, since he behaves in such a way that he follows more of his instincts than his reason, namely, that he experiences the world through his senses instead of making use of his intellectual skills. He acts aggressively and shows no sympathy to anybody that he comes across throughout the novel, which according to Lombroso's view of the criminal man, displays his atavism and criminal nature in relation to it, as criminal has "complete absence of morals and affective sensibility" and "absence of remorse and foresight" (222). An example for Hyde's aggressive and violent traits could be the scene where Mr. Enfield sees him trampling on a girl as if she is just a stone standing on Mr. Hyde's path and relates that Hyde's attack on the girl was "hellish to see" (7).

Behind these evil actions lies that fact that Mr. Hyde is not able to construct social bonds and moralities due to his lack of building such emotional and social humanistic traits. Paul Farber describes Darwinian morality as "a natural development for an

intelligent social animal" where all beings are striving to achieve a "moral sentiment" (Farber 15). Cleary, Hyde, as an atavistic monster, lacks these moralities and for this reason cannot develop moral values within himself and with the other members of the society, but instead, sensuality dominates the essence of his traits. Jekyll expresses how sensual the feeling of being Hyde stating that "I have more than once observed that in my second character, my faculties seemed sharpened to a point and my spirits more tensely elastic." (Stevenson 77) Clearly, as a result of the transformation into Hyde, Jekyll feels more powerful yet less sensible. Another incident that reflects Hyde's savagery is his attempt to murder Sir Danvers Carew without any reason and with an "ape-like fury" (Stevenson 25) which indicates that he is in a hurry and desires to escape from there as soon as possible. His hurry could be explained as an example of Cohen's "Second Thesis" about the monstrosity where he claims that "the monster always escapes" and leaves his food prints as he notes: "we see the damage that the monster wreaks" (4). As a matter of fact, immediately after Hyde kills Carew, he escapes from there like he vanishes leaving his victim behind "in the middle of the lane, incredibly mangled" (Stevenson 25). The constant escapism attributed to the monsters by Cohen can also be attributed to the primitiveness and animality. In this sense, Hyde's committing a crime and sudden escape from the crime scene resembles to a primitive animal's destruction and cowardice.

Mr. Hyde's atavistic and bestial nature creates fear among all the people he comes across, which amounts to his marginalisation from the society. Jekyll's friend Enfield expresses his fear from Hyde after the incident where Hyde tramples over a girl, claiming that Hyde "gave me one look, so ugly that it brought out the sweat on me like running" (Stevenson 8). Similarly, Dr. Lenyon also describes the feeling of Hyde's physical contact as "icy pang along my blood" (Stevenson 60). However, in addition to the feeling of fear, Hyde also arouses hatred among the people and in this hatred, it is possible to trace the implications of the eugenics movement, which primarily suggests that the "unfit" ones should be eliminated for the stronger to procreate and survive (Hack 79). Considering the motivations behind it, Martin Danahay evaluates Hyde and Jekyll as the representatives of class difference believing that bodily disposition reflects the class status and notes that "when he [Jekyll] becomes Mr. Hyde he switches from a

'decent' and respectable body into the 'indecent' body of a working-class man ... while the hedonistic body is marked both as 'degenerate' and of lower social class" ("Dr. Jekyll's" 23). As noted, his degenerate body mirrors how society characterises the working class bodily dispositions. Considering the role of physical appearance in classifying the subject, Stevenson states in his essay "Truth of Intercourse" that "to explain in words takes time ... but the look or the gesture explains in a breath" (95). Hence, his physical deformation intensifies the notion of his inferiority. Sarah Goins examines Hyde's physiological imperfection as an indicator if "moral decency" and claims that it is the "core of eugenics" (6). As observed in the novel, Hyde's degeneration is observed both in the physical sense and moral sense.

As for the moral side, people's reactions against him after his criminal deeds depict how he is unwanted in the society. When Mr. Enfield depicts the scene where Hyde tramples over the girl, he mentions how aggressive the woman who witnesses the incident in the words: "all the time as we were pitching it in red hot, we were keeping the women off him as best we could, for they were as wild as harpies. I never saw a circle of such hateful faces" (Stevenson 8). Moreover, in the same scene, the surgeon helping the girl "turned sick and white with the desire to kill him" after the incident (Stevenson 8). These reactions indicate that Hyde is seen as someone who is supposed to be destroyed for the rest of the society to live in prosperity. His existence poses a threat to the order of a civilised society and its members. In this regard, Stevenson, according to Julia Reid "contested the relentlessly progressivist accent of evolutionary anthropology" (110). Thus, with Hyde, Stevenson awakens the fear of being defeated by a less developed form, and in this regard, he can be considered as Darwinian. However, as the story progresses, believing that Hyde poses a threat to the society with his savagery, Jekyll decides to destroy Hyde, which can be considered as heroic in eugenics ideals. In support of this heroic attempt, it is stated that: "when the villains of late Victorian fiction were imagined as degenerate, deformed and atavistic monsters, the protagonist detective or adventurer sometimes transformed into a heroic eugenics" (Höglund 47). Jekyll accomplishes this eugenics dream by committing suicide and ending both his and Hyde's life at the end of the novel.

Apart from this, hatred against Hyde among the society displays the cultural aspect of the monster. As reported by David D. Gilmore "the cultural displacement mechanism of the monster in folklore [is] a universal metaphor for the unwanted backward-leaning retrograde self' (189). Thus, the monster's primitive nature awakens the primitive essence in the society for which he is displaced in the society. In the same vein, Julia Reid also evaluates the reactions of the people against Hyde's primitivism as a reflection of their fear from their own hidden brutal nature. She suggests that "as the focus on Hyde's antagonists indicates, it is preoccupied by the contagious nature of his atavism rather than by Hyde himself" (102). Clearly, the antagonists (Dr. Lanyon and Mr. Utterson) consider Hyde as a treat to the norms and cultures of the Victorian civilization as they desire to "make his name stink from the end of the London to the other" (Stevenson 8). Since the society obliges them to conform to the norms and restrictions of the society, these men cannot uncover their wilder sides which Hyde triggers in them. This wild side that they repress in themselves is clearly revealed in their thought as narrated in the novel: "killing [Hyde] being out of the question, we did the next best" (Stevenson 8).

The undignified essence in Jekyll's being urges him to take the potion and wear the body of Mr. Hyde to enjoy "liberty, the comparative youth, the light step, leaping pulses and secret pleasures" (Stevenson 74) again and again. However, as a result of his giving up repressing his wild nature, Jekyll creates another embodiment from himself and spoils the unity of binary oppositions in the society. As a matter, when Jekyll explains that he can transform into Hyde, Lanyon's life "is shaken to its roots" (Stevenson 62). Since previously he considers Jekyll's experiment as wrong and justifies himself believing that Jekyll is insane, Lanyon convinces himself that "he is dealing with a case of cerebral disease" (Stevenson 58). However, after Jekyll's revelation about his case, he becomes sick due to the trauma as it is narrated: "the rosy man had grown pale; his flesh had fallen away; he was visibly balder and older" (Stevenson 32). He expresses how his life is devastated when talking to Utterson: "[W]ell, life has been pleasant; I liked it; yes, sir, I used to like it. I sometimes think if we knew all, we should be more glad to get away" (Stevenson 36). He cannot stand the truth about Jekyll's atavistic transformation and dies soon. His death, according to Cindy K. Hendershot, stems from

the loss of faith in the oppositions, namely, the binaries between the animalistic past and modern future after the reveal of Hyde's turning back into Jekyll (109). In other words, the transformation shift from Jekyll to Hyde and Hyde to Jekyll destroys the consistency of Lanyon's world. In this regard, Hyde's existence threatens the unity of binary oppositions and the faith in the order of civilised society. Moreover, Hyde's existence as an atavistic being contradicts with the progressive concept of evolution which is anticipated in Darwin's words:

At some future period, not very distant as measured by centuries, the civilised races of man will almost certainly exterminate, and replace, the savage races throughout the world. At the same time the anthropomorphous apes ... will no doubt be exterminated. (*The Descent* 201)

As the quote emphasises, the civilised races will exterminate the non-civilised and continue to evolve. As a result of the extermination of the anthropomorphous apes, the future human races will end the presence of the descendants of humans. According to this anticipation, Hyde is supposed to be exterminated for the rest of the people to continue the evolutionary progression. The idea that Hyde is from a generation that is supposed to disappear is manifested in individual level in Jekyll's body. He expresses his concern about losing the domination over his body to Hyde as follows: "The powers of Hyde seemed to have grown with the sickliness of Jekyll" (Stevenson 80).

In addition to the extermination aspect, considering the human's evolution in the future, Darwin projects how the battle of immoral instincts and civilised values in human essence will proceed as follows:

Looking to future generations, there is no cause to fear that the social instincts will grow weaker, and we may expect that virtuous habits will grow stronger, becoming perhaps fixed by inheritance. In this case the struggle between our higher and lower impulses will be less severe, and virtue will be triumphant. (*The Descent* 104)

According to this description, as humans evolve, the marks of atavism will be less and less apparent while the "virtuous habits" will dominate human nature. Within the

context of the novel, Jekyll attempts to separate his atavistic and instinctual side from the civilised and virtuous in order to sterilise himself from the unjust so that the just as narrated in the novel, "could walk steadfastly and securely on his upward path, doing the good things in which he found his pleasure and no longer exposed to disgrace and penitence by the hands of this extraneous evil" (Stevenson 65-66).

This desire to surpass the duality of human nature reflects Jekyll's acknowledgement of the multispecies existence which can be seen in the arguments of posthumanism theory. In this sense, being aware of the animal essence in his being is an indicator of humility which is also an anti-anthropocentric perception. David Roden identifies posthumanism as a criticism of the "human-centered (anthropocentric) ways of understanding life and reality" (*Posthuman* 10). As mentioned in the Introduction, although the theory is commonly associated with artificial intelligence, essentially it indicates an existence with multiple bodies. Considering this multiplicity in human essence, Cary Wolfe notes that posthumanism:

forces us to rethink our taken-for-granted modes of human experience ... by recontextualizing them in terms of the entire sensorium of other living beings. ... But it also insists that we attend to the specificity of the human ... [by] acknowledging that it is fundamentally a prosthetic creature that has coevolved with various forms of technicity and materiality, forms that are radically 'not-human' and yet have nevertheless made the human what it is. (What is xxv)

This awareness of human's multiplicity coevolving with the technologically advanced world also indicates the ancknowledgement of the human's organic materiality and changeability. In the novel, this awareness is narrated in Jekyll's statement as such: "I hazard the guess that man will be ultimately known for a mere polity of multifarious, incongruous and independent denizens" (Stevenson 65). Moreover, in Jekyll's attempt, it is also observed that he aims to separate his primitive side from the reasonable and civilised to reach a more developed state. With this pursuit, Jekyll tests his experiment in his own body which shows that he degrades the human body into a state of a lab rat.

Behind this experiment lies a decrease in the humanistic ideals which again is an argument of posthumanism theory. However, in Jekyll's pursuit, medical and scientific intervention into his body has a significant place. Considering the relationship between science and humanism, Sylvia Pamboukian suggests that "[i]n modern cultural formations, scientific vices are more attractive than humanistic virtues (243). Hence, while posthumanism acknowledges an anti-anthropocentric approach in understanding life, scientific endeavours became a means of this acknowledgement, and as a result, the value given to human decreases. In the novel, this decrease firstly proceeds in Jekyll's dream of collapsing the unity of duality in human's nature. He narrates how he desires to achieve this dream confessing as follows:

[E]ven before the course of my scientific discoveries had begun to suggest the most naked possibility of such a miracle, I had learned to dwell with pleasure, as a beloved daydream, on the thought of the separation of these elements. (Stevenson 65)

As a result of this ambition, the body that he desires to acquire is supposed to be more enhanced and civilized than the original one for it is expected to be sterilised from primordial impulses, a more sublime, namely a transhuman body.

In concept, transhuman state aims to surpass the limitations that human body is subject to for the sake of its betterment, as such "[w]hat constitutes or defines a being as transhuman ... is essentially reliant on having, in one way or another, overcome those limitations imposed upon human individuals" (Grantham 19). As noted, to overcome human limitations is the primary objective of transhumanism, yet these limitations stem from the physical imperfections of the human body. Therefore in the cause of advancing human capacities, the body's weaknesses are tried to be improved through technological interventions. With regard to this, it is stated that "[g]iving primacy to rationality, transhumanism privileges and elevates the mind while the body is devalued and thematised as a limitation, whose vulnerability technological innovation seeks to reduce if not eliminate" (Zalloua 313). Nevertheless, the means of this improvement, namely to surpass the limits of human condition do not only involve technological interventions but medicine as well (Birnbacher 105). In the novel, Jekyll also considers his body as a

weak and imperfect due to the instinctual drives that lie beneath his being and necessitates an intervention into his body to achieve his advanced self. He devalues the body's imperfect nature and prioritises reason over it, and with this motivation, he makes a medical intervention to his body. The potion that he takes in this pursuit stands for a tool, a medical enhancement for Jekyll to transcend himself; as narrated in the novel: "direction of [his] scientific studies ... led wholly toward the mystic and the transcendental" (Stevenson 65).

On the other hand, the acknowledgement about human's being "a prosthetic creature that has coevolved with various forms of technicity" (Wolfe, *What is xxv*) is essential to understand posthumanism. In this respect, humans should be aware of the fact that human evolution occurs through the interaction between human and his environment and also technological and medical applications. Nevertheless, as a result of medical interventions, the concept of human might completely change. As stated by Bert Gordjin and Ruth Chadwick:

[u]ltimately our striving to improve ourselves according to our own wishes might even result in a situation, where it is no longer appropriate to speak of a 'human being' at all. After all, interventions with the purpose of enhancement might bring about such radical changes that the result could only be regarded as a posthuman being. (4)

As demonstrated in the quotation, medical intervention might result in the end of the human, and the emergence of the posthuman. In Jekyll's case, while he considers the body as a transient matter eligible to be the object of medical intervention, which indicates his posthumanist perspective, his pursuit, on the other hand, can be regarded as a transhumanist dream as he aims to achieve a body sterilised from the animalistic and primitive drives. Thus, it would not be wrong to assume that in Jekyll's attempt, the potion that he takes stands for a means of becoming transhuman. However, though he aims to purify his nature from the imperfections stemming from his primitive essence, this new body turns out to be a primitive and degenerate monster.

However, Michael Grantham states that Hyde stands for a transhuman subject due to his physical superiorities. Giving reference to the section where Hyde murders Sir Danvers he claims that after Jekyll's intake of the medicine, he overcomes the limitations imposed on humankind and achieves a superior condition in Hyde's body in physical sense (Grantham 20). The section is narrated in the novel: "[a]nd the next moment with ape-like fury, he was trampling his victim under foot, and hailing down a storm of blows, under which the bones were audibly shattered and the body jumped upon the roadway" (Stevenson 25). In effect, Hyde can easily swoop down on the man in front of him by attacking with superhuman speed and agility. However, the basis of this impetuosity is not a transhuman trait, as Grantham suggests, but rather the characteristics of an animal, or a primitive monster, as defended above. Nevertheless, the primary motivation behind Jekyll's attempt is to achieve the transhuman, and this pursuit he is tempted by the attraction of science.

This attraction, according to Sylvia Pamboukian, creates literary figures like mad doctors who produce monsters with the excitement of creating a new being and then kill them to maintain the mainstream system (236). Namely, science provides a gate for the scientists to challenge the system by creating new beings, though the creations happen to turn into monstrous figures that threat the system. According to her, the scientists like Dr. Jekyll who end up being enslaved to what they create displays "the moral complexity and relativism of modernity, the unforeseeable consequences of scientific development, and the attractiveness of science's epistemological disruptions" (Pamboukian 243). In other words, the experiments of scientists result in the destruction of the monsters because of their corruptive nature. As for the enslavement, it would not be wrong to argue that the temptation of science, no matter how it might be "unforeseeable", supersedes the scientist's omnipotence. In other words, scientists take the risk of losing their authority for the sake of creating a new being, a monster. Cohen, on the other hand, stresses that a monster opens a new gate to the constructed boundaries of the system as he notes: "the monstrous offers an escape from its hermetic path, an invitation to explore new spirals, new and interconnected methods of perceiving the world" (7). This attraction that Jekyll is tempted by is narrated in the novel: "the temptation of a discovery so singular and profound at last overcame the

suggestions of alarm" (Stevenson 66). What Cohen demonstrates as "exploring new spirals" could be observed in Jekyll's confession about how he feels after the transformation: "I was conscious of a heady recklessness, a current of disordered sensual images running like a mill race in my fancy, a solution of the bonds of obligation, an unknown but not an innocent freedom of the soul" (Stevenson 67).

These scientific vices do not only trigger Jekyll but also Dr. Lanyon as they offer "a new province of knowledge and new avenues to fame and power" (Stevenson 61) which display that the mysterious attraction of science even drives the respectable Dr. Lanyon to indulge in such a dangerous pursuit. In this regard, it would not be wrong to deduce that with the decrease in the humanistic ideals, scientific pursuits turned into more significant challenges to be accomplished in the nineteenth-century period. As a result, this perception brought forth overambitious scientists who create monsters. Hence, with this pursuit, Jekyll dreams of surpassing his liminalities stemming from his atavistic nature for which he aims to be a transhuman. However, undermining humanism and human moralities and acknowledging human's con-existence with multiple species reflects the very essence of the posthumanist thinking in the novel.

To conclude, the novel explores the concepts of monstrosity and posthumanism in two identities of one person. One of the earliest commentators on the novel noted that the double in it "does not take the form of a personified conscience" but a "separable self," a different entity more horrifying than "a spectre, a ghoul, or even a vampire" (Maixner 200). This very splitting is the primary reason which makes its story powerful and unsettling. While the devolved and atavistic body of Hyde is classified as a degenerate being, his monstrosity is developed out of this very degenerate nature that lies in him. His degeneracy becomes the very reason for his monstrosity. Thereby, the novel emphasises that while the degeneration theory projects the possibility of human being's turning into their progenitors in the evolutionary process, it also underlines the animality that lies beneath the human essence. This essence also projects the animal nature of monsters as embodied by Hyde. For this reason, degeneration theory merges with monstrosity in Stevenson's novel. Therefore, with this emphasis, Stevenson might indirectly imply that this animalistic nature should be supressed for the sake of the unity

of society, since following the temporary pleasures of that nature might result in a catastrophe.

Hyde as the embodiment of the repressed urges of human being's primitive origins, turns into a mask under which Jekyll could be able to enjoy the liberation from the restrictions of the society. However, though Hyde provides freedom for Jekyll, this enjoyment eventually turns into an enslavement since Hyde ends up a being an entity that is rejected in the society for he uncovers the primitivism hidden in human nature. With regard to this rejection, Theodora E. Goss utters that "[o]ther characters, particularly gentleman [sic] such as Utterson, Enfield and Lenyon, feel an instinctive loathing and fear when confronted with Hyde, not because he is a monster but because he represents their own potential monstrousness" (210). On the other hand, this continual shift between Jekyll's and Hyde's bodies reflects the fight for survival in the Darwinian sense, while it can also be read as a struggle between the primitive past and posthuman future. The motivations behind Jekyll's experiment reflect human being's desire for liberation from his restrictions. His attempt to accelerate human evolution through medical application can be considered as a transhumanist dream. Nevertheless, the idea of bringing a new discourse to the notion of the human also indicates a posthumanist approach. Regarding this, Bruce Clarke states that "the posthuman imagery starts from some transformation of the human image" (141). Consequently, the human concept is widely explored around the concept of degeneracy and its concomitant monstrosity, though certain motivations in Jekyll's scientific experiment can be considered as indicators of transhumanist ideas in the novel.

In the Darwinian sense, Hyde as a degenerate, atavistic and primitive side of human beings, creates a contrast with the norms of the Victorian society, and this contrast underlines the necessity of human enhancement. On the other hand, by splitting his personality, Jekyll aims to achieve a state of a transhuman, and the motivations behind this stem from the necessity of human enhancement since he pursues to separate his primitive side from the civilized and reasonable. In this regard, Hyde's degenerate nature reinforces the requirement of evolutionary progress. Stevenson in the novel brings a new perspective to the concept of monster and its relationship with human

nature in the clash of Jekyll and Hyde since Hyde is not completely another being for he is another side of Jekyll. Considering this Daniel L. Wright suggests as follows:

[T]o assume that Jekyll represents human 'good' while Hyde embodies that which is 'evil' is to forget that Hyde is but the consequence of Jekyll's experiments in forbidden science; he exists only by the will of Jekyll; he has no independent being. Hyde is no other than Jekyll, he is Jekyll. (255)

Ostensibly, although Hyde is considered to be monstrous and degenerate, Jekyll gives agency to him. Clearly, monstrosity lies in the possibility of human beings turning into their progenitors, their degenerate bodies. In this regard, Stevenson might imply that monstrosity emerges from and within human nature and always waiting for a trigger to spring out, and this trigger arises out of a transhumanist dream.

CONCLUSION

The discussion over the definition of human which has continued for centuries becomes even more significant in the nineteenth century when industry, technology and scientific developments are on the rise. However, these concerns about the state of human also prompt the emergence of a new human concept which is beyond the limits of the normative human. In these two leading novels of the period, the concept of human is handled in such a way that the main characters are described as posthumanists due to their motivations of creating new selves and achieving the sublime. Although these novels were written in the nineteenth century, the scientific practices of the period denote a futuristic dream, which surpasses the human limits. It is this dream that becomes a source of inspiration as explored in these novels. The representations of these scientific developments in literary works are handled in such a way that they seem to adopt the attitude and ideology of posthumanism in the sense of rejecting the sublimity and divinity of human by degrading human into the state of a test subject. That is to say, the newly created entities in these novels emerge out of this ideology that lies behind these scientific contexts. As this analysis reveals, these entities bring together different procreations in both novels.

In *Frankenstein*, the posthuman being is considered to be monstrous, since the motivations that lead to the emergence of this monster indicate the ideals of posthumanism, namely to surpass human limits and to be a being beyond human. The monster challenges the uniqueness and superiority of human with his uncanny body which is comprised of animal and human body parts. Since "posthumanism sees the problem originating in belief in human uniqueness and our exaggeratedly hierarchical relationship with other species" (Goodbody 64), Victor's monster with his grotesque nature stands as the embodiment of a new species that surpasses the hierarchical frame humans construct. Moreover, his nonhuman state is the primary reason for his being called "monster" throughout the novel. Thus, with this novel, it is indirectly unveiled that the state of the nonhuman requires a new expansion since attributing monstrosity to a new species stems from rejecting the nonhuman aspects in the human nature. Considering this debate, Christian J. Emden asserts "[h]uman beings, in short, are a

'multispecies,' always existing in the plural, and the differentiation between the human and the nonhuman, thus, appears to be quite problematic" (57). That is to say, the primary aspect of understanding human in the posthumanist sense is the recognition of his/her nonhuman nature. In support of such a comprehension, Jane Bennet asserts that "human culture is inextricably enmeshed with vibrant nonhuman agencies" (108). Thus, the monster in the novel stands for the embodiment of this union since the materials that construct his body are human and animal body parts. While initially he is supposed to be an animal as wonderful as man, instead, his hybrid nature makes him horrific, uncanny and monstrous. Thus, he is considered to pose a threat to the normative human concept. Accordingly, as the embodiment of this thought, he cannot escape from being labelled as a monster. For this reason, the novel explores the necessity of a new perspective, namely, a new recognition of the multiplicity of the human body, as only after this recognition, this uncanny being can be considered as something rather than a monster. He might even be called human.

In addition to this ascription which stems from the monster's posthuman features, the body parts that form him as a species have a significant value since they make him a human-animal hybrid. Such a practice of combining human and animal parts and creating a monster out of this combination projects certain scientific practices conducted in the period like dissection, since at the time when the novel was written, it was common to make experiments and medical interventions on the dissected bodies. What is significant concerning the relationship between these practices and posthuman aspect is that they signal for devaluing the human embodiment and dignity, and accordingly, put forward an anti-anthropocentric approach which is the core of posthumanism theory. For this reason, these practices not only shed light on the scientific context of the period but also signal the essential motivations of posthumanism. Therefore, although these practices belong to the nineteenth century, they provide an insight into a futuristic perception in Victor's hands.

After assembling the body parts via dissection, Victor gives life to his creature by means of a technological application: galvanism. Although such an application, "may have been seen to be as mystical as the life granted by gods in earlier texts" (Shakeshaft

33), it indicates a futuristic view regarding giving life to a dead body via employing technology. What is significant with respect to the practice of galvanism within the context of posthumanism is that it stands for a way of creating a new species. In a similar vein, as Victor brings together different human and animal limbs to make a new species by dissecting them, this practice also can be considered as a way of making a posthuman being as it reinforces the affinity between human and animal. If this practice is considered separate from creating a new species, it can be evaluated within a transhumanist dream. That is to say, since Victor believes that science and technology can enhance human, galvanism, too, can be evaluated among these sciences. However, considering that transhumanism is a purpose and idea that intensifies humanism, Victor's experiment of animal electricity cannot be framed within transhumanist ideals since Victor uses the human body as a material and an experiment subject by putting it on the same level with the animal body. On the other hand, as emphasised in the first chapter, he aims to create a new species rather than enhancing a human being, which signals his pursuit of achieving the posthuman rather than transhuman.

Apart from these, Frankenstein also emphasises that the scientific practices of the period enable man to master nature, though this attempt causes the emergence of an uncanny creature, which poses certain questions about the borders between the human and nonhuman throughout the novel. In the sense of prompting the reconsideration of human-nonhuman relationship, it is stated that Sir Humphry Davy's ideas contribute to the aspect of creating a man through unnatural means in the novel (Holmes 1630). Thus, these ideas create a necessity of re-evaluation of man and his relationship with his environment, which can be found in the posthuman condition. This condition, as put by Rosi Braidotti "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" (The Posthuman 1-2). Influenced by this attitude, Victor creates the monster artificially whose artificiality becomes the major reason for his being regarded as a monster since his body exceeds the physical and mental levels of an ordinary person. Thus, the novel demonstrates the feasibility of such nineteenth-century practices in the ideological context of relatively new posthumanism theory. In addition to the scientific developments, the ideas of the period in terms of man and his

relationship with nonhuman suggest that man can dominate and change nature through science. Convinced by these ideas, the author creates a story in which the protagonist makes a being through unnatural means that eventually leads to the emergence of a posthuman body.

However, the essence of the monster prompts certain questions about the aspects that construct the scope of human and nonhuman. In this regard, his state of being other than human but not exactly unhuman is the primary element that makes him a monster. Furthermore, since he becomes the unwanted and rejected in the society, this rejection triggers him to turn into a real evil; as Haraway puts it, monsters are the "inappropriate/d others" (Haraway, *The Promises* 295). In other words, his improper state causes both Victor and other people in the society to reject him and, as a result, he is ascribed as an evil and horrifying being, namely a monster. Since the appearance plays a significant role on the basis of all these, it is clear that the physical formation is significant in the sense of the representation of monstrosity in the novel, since it is associated with "ontological liminality" (Cohen 6).

This liminality is seen both in the monster in Shelley's *Frankenstein* and in Hyde in Stevenson's *The Strange Case*. In both novels, this liminality comes from some kind of hybridity in these characters. As Pramod K. Nayar puts it, "humans who function on the level of sheer animality - called 'irrational behaviour' – are treated as monsters" (*Poshumanism* 112). In other words, to be animal-like is associated with monstrosity. For this reason, Nayar considers Hyde as the "moral monstrous" (*Posthumanism* 84). In this regard, monstrosity in Hyde is rooted in the animal side of his nature. This animality proceeds from his primitive and degenerate nature as emphasised in the analysis of the second chapter. This primitive self implies that Hyde is considered to be a monster because it causes Hyde to act on evil and wild impulses. Namely, he becomes monstrous because his attributes are criminal and savage and "inherently malign and villainous," as narrated in the novel (Stevenson 70). Therefore, Hyde's criminal deeds display the primitive man's inclination to evil in the evolutionary sense while such deeds are also associated with the emblems of monstrosity. In the case of Hyde, the concept of monster is seen in the form of the emergence of a degenerate and primitive

body as a result of the evolutionary process going wrong. Therefore, degeneration and monstrosity are seen together in such a way that the embodiment of this combination feeds on both concepts in the novel. In this sense, the novel exemplifies a case in which a human body exhibits animalistic features both physically and behaviorally as a result of degeneracy, and consequently becomes a monster.

Behind the degenerate body as represented in the novel, the theory of evolution which influences and feeds the formation of degeneration theory has a significant value, regarding the context of the scientific developments in which the novel was written. In this sense, the novel shows that the theory of evolution not only comprises the framework of the natural sciences but also affects the degeneration theory, which explores the link between the brutality and criminal tendency within the physical formation of the human in the evolutionary sense. Apparently, Hyde's evil deeds and criminal behaviours are the result of his degenerate being. As for the monster's degeneracy, Cesare Lombroso's ideas regarding the physical structure and behavioural tendency of criminal man in an evolutionary sense help comprehend the aspects that make Hyde a primitive and degenerate being. In the analysis of the novel, it is emphasised that his atavistic and primitive nature creates an ambiguity in terms of his classification as a human being in the society, since he is often referred to as something other than human throughout the novel. This indefinability attributes him a state of being an "abhuman" since his body as emphasised is "not-quite-human subject, characterized by its morphic variability, continually in danger of becoming not-itself, becoming other" (Hurley 3-4). This abhuman state deprives him of being subject to any kind of structuring and eventually proves his monstrosity in Cohen's terms, as he suggests that monsters cannot be subject to any structuration (6).

In addition to this, Hyde's existence as the repressed side of Jekyll also underlines his being a monster. In other words, within the context of the novel, monstrosity emerges in Hyde's body which, represents the primitive manners hidden in Jekyll's nature. For this reason, the novel indirectly suggests that the monster lies within human's nature and the monstrous deeds match with the primitive deeds that human beings suppress. This repressed side invokes fear and anxiety both within Jekyll's mind and within the society

that Hyde poses a threat to. The most important factor that defines Hyde as a monster in society is the fear of the possibility of his uncovering the repressed, wild and primitive feelings in people's nature. This concern is found in common in the case of the monster in Shelley's *Frankenstein* in which Victor fears the possibility of monster's dominating people. As Nayar puts it, people are afraid of monster's reproducing and creating a new generation ("Our Monsters" 8).

To conclude, this study emphasises that these novels present a comprehensive view of how the scientific elements like galvanism, dissection and theory of evolution work on the theme of monstrosity. *Frankenstein* not only examines galvanism and dissection practices within the context of posthumanist ideology but also points out the ideas of the period considering the relationship between science and human and how these ideas contribute to posthumanist thought. Moreover, this study might be an example of how the essential arguments of posthumanist theory are observed in the works that are published more than a century before the theory appears in the literary area. Furthermore, the novel also demonstrates how a superior posthuman being is identified as a monster because of his uncanny and weird appearance. In this sense, since posthuman subject is considered to be different from the familiar and thereby defined as a monster, this state needs to be re-evaluated from an anti-anthropocentric point of view.

Stevenson's *The Strange Case*, on the other hand, explores the theme of monstrosity, which is in common with *Frankenstein*, in the nineteenth-century scientific context. As mentioned, the monster in the novel emerges as a reflection of the theory of evolution and the accompanying degeneration theory. Nevertheless, the main arguments of both posthumanism and transhumanism are seen in Jekyll's aim to achieve a better state of his self. On the one hand, Jekyll's realization of the animal essence in his body is associated with the relationality of the species argument of posthumanism theory. On the other hand, his use of scientific and medical applications to get rid of this primitive and animalistic side in his body to achieve a more sterile self makes him a transhumanist. Thus, while the novel treats degeneracy as an obstacle to human development in Hyde's body, it also reveals the necessity of getting rid of this

degeneracy and monstrosity by emphasising human enhancement in Jekyll's body. Concisely, in this study, the relation of the degenerate monster with evolutionary regression and the relation of transhumanism with the idea of scientific and technological evolution are shown as two opposite poles in the bodies of Hyde and Jekyll.

WORKS CITED

Primary Sources

- Shelley, Mary. *Frankenstein or the Modern Prometheus*. Ware: Wordsworth Classics, 1999. Print.
- Stevenson, Robert Louis. *The Strange Case of Dr. Jekyll and Mr. Hyde.* İstanbul: MK Publications, 2017. Print.

Secondary Sources

- Ackerknecht, Erwin H. *A Short History of Psychiatry*. New York and London: Hafner Publishing, 1968. Print.
- Aldiss, B. Wilson and David Wingrove. *Trillion Year Spree: The History of Science Fiction*. London: Paladin Grafton Books, 1988. Print.
- Arata, Stephen. Fictions of Loss in the Victorian Fin De Siecle. Cambridge: Cambridge UP, 2008. Print.
- Askland, Andrew. "The Misnomer of Transhumanism as Directed Evolution." International Journal of Emerging Technologies and Society 9.1 (2011): 71-78. ASU. Web. 11 Nov. 2018.
- "A Venerable Orang-outang." *The Hornet*. March 22, 1871. National Portrait Galery, London. *National Portrait Gallery*. Web. 10 Mar. 2019.
- Barad, Karen. "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter." *Journal of Women in Culture and Society* 28.3 (2003): 801-831. *JSTOR*. Web. 8 Dec. 2018.
- Bardziński, Filip. "Transhumanism and Evolution: Considerations on Darwin, Lamarck and Transhumanism." *Ethics in Progress* 5.2 (2014): 103-115. *Pressto*. Web. 22 Apr. 2019.
- Baudrillard, Jean. *The Perfect Crime*. Translated by Chris Turner. London: Verso, 1996. Print.
- Beer, Gillian. Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction. Cambridge, UK: Cambridge University Press, 2009. Print.
- Belt, Henk van den. "Playing God in Frankenstein's Footsteps: Synthetic Biology." *NanoEthics* 3.3 (2009): 257–68. *PMC*. Web. 8 Dec. 2018.
- Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Durham and London: Duke UP, 2010. Print.
- Birnbacher, Dieter. "Posthumanity, Transhumanism and Human Nature." *Medical Enhancement and Posthumanity*. Ed. Bert Gordijn and Ruth. N.p.: Springer, 2008, 95-106. Print.

- Blum, Deborah. "Conceiving 'Frankenstein'" *The New York Times*. The New York Times, 1 Feb. 2013. Web. 12 Nov. 2018.
- Bolter, J. David. "Posthumanism." *The International Encyclopedia of Communication Theory and Philosophy. Wiley Online Library.* 3 Mar. 2016. Web. 12 Nov. 2018.
- Booker, M. Keith and Anne-Marie Thomas. *The Science Fiction Handbook*. Chichester: Wiley-Blackwell, 2009. Print.
- Bostrom, Nick. "In Defence of Posthuman Dignity." *Bioethics* 19.3 (2005): 202-214. *Wiley Online Library*. Web. 4 Nov. 2018.
- ---. "A History of Transhumanist Thought". *Journal of Evolution and Technology* 14.1 (2005): 1-30. *PhilPapers*. Web. 8 Mar. 2019.
- ---. Superintelligence: Paths, Dangers, Strategies. Oxford: Oxford UP, 2017. Print.
- ---. "Transhumanist Values." *Journal of Philosophical Research* 30 (2005): 3-14. *Philosophical* Web. 10 Oct. 2018.
- ---. "Why I Want to be a Posthuman When I Grow up." *The Transhumanist Reader: Classical and Contemporary Essays on the Science, Technology, and Philosophy of the Human Future*. Ed. Max More and Natasha Vita More. Chichester: Wiley-Blackwell, 2015. 28-53. Print.
- Botting, Fred. *Making Monstrous: Frankenstein, Criticism, Theory.* Manchester: Manchester UP, 1991. Print.
- Bowler, Peter J. "Darwinism and Victorian Values: Threat or Opportunity." *Proceedings of the British Academy*. 78 (1992): 129-147. *The British Academy*. Web. 18 Feb. 2019.
- Braidotti, Rosi. *The Posthuman*. Cambridge: Polity Press, 2013. Print.
- ---. "Signs of Wonder and Traces of Doubt: On Teratology and Embodied Differences." Between Monsters, Goddesses and Cyborgs: Feminist Confrontations with Science, Medicine and Cyberspace. Ed. N. Lykke and R. Braidotti. London: Zed Books, 1996. 135-52. Print.
- Burdett, Carolyn. "Post Darwin: Social Darwinism, Degeneration, Eugenics." Discovering Literature: Romantics & Victorians. British Library. 15 May 2014. Web. 2 Feb. 2018.
- Burkhardt, Richard. W. "Lamarck, Evolution, and the Inheritance of Acquired Characters." *Genetics* 194.4 (2013): 793–805. *PMC*. Web 4 Oct. 2018.
- Butler, Marilyn. "Introduction." Frankenstein, or The Modern Prometheus: The 1818 Text. Mary Shelley. Oxford: Oxford University Press, 1998. ix-li. Print.
- Butler, Samuel. *Erewhon and Erewhon Revisited*. New York, Mineola: Courier Dover Publications, 2015. Print.

- Buzwell, Greg. "'Man Is Not Truly One, but Truly Two': Duality in Robert Louis Stevenson's Strange Case of Dr Jekyll and Mr Hyde." *The British Library*. The British Library, 13 Feb. 2014. Web. 05 Mar. 2019.
- Caldwell, Janis McLarren. Literature and Medicine in Nineteenth-Century Britain: From Mary Shelley to George Eliot. New York: Cambridge UP, 2004. Print.
- Campbell, Joseph. *Pathways to Bliss: Mythology and Personal Transformation*. Novato: New World Library, 2004. Print.
- Campbell, Mary Baine. "Artificial Men: Alchemy, Transubstantiation, and the Homunculus." *Republics of Letters: A Journal for the Study of Knowledge, Politics, and the Arts* 1.2 (2010): 4-15. 30 Apr. 2010. *Arcade: A Digital Salon*. Web. 12 Oct. 2018.
- Carretero-González, Margarita. "The Posthuman that Could Have Been." *Relations* 4.1 (2016): 53-64. Web. 12 Jan. 2019.
- Caroll, Noël. *The Philosophy of Horror or Paradoxes of the Hearth*. New York: Routledge, 1990. Print.
- Carus, Paul. "La Mettrie's View of Man as a Machine." *The Monist* 23.2 (1913): 294–306. *JSTOR*, Web. 12 Mar. 2019.
- Carvalko, Joseph. *The Techno-Human Shell: A Jump in the Evolutionary Gap.* Mechanicsburg: Sunbury Press, 2012. Print.
- Cartwright, John H. and Brian Baker. *Literature and Science: Social Impact and Interaction*. Santa Barbara, California: ABC-CLIO, 2005. Print.
- Chambers, Robert. *Vestiges of the Natural History of Creation*. New York: Wiley and Putnam, 1845. *Archive.org*. 12 Jun. 2017. Web. 2 Apr. 2019.
- Cimatti, Felice. "Frankenstein on Language and Becoming (Post)Human." Ecozona 7.1 (2016): 10-26, Academia.edu. Web. 15 Apr. 2019.
- Clarke, Bruce. "The Non-human." *The Cambridge Companion to Literature and the Posthuman.* Ed. Bruce Clarke and Manuela Rossini. NewYork: Cambridge UP, 2017. 141-52. Print.
- Cohen, Jeffrey Jerome. "Monster Culture (Seven Theses)." Ed. Jeffrey Jerome Cohen. *Monster Theory: Reading Culture.* Minneapolis: U of Minnesota Press, 1996. 3-25. Print.
- Cole-Turner, Ronald. Transhumanism and Transcendence: Christian Hope in an Age of Technological Enhancement. Washington, D.C.: Georgetown UP, 2011. Print.
- Comitini, Patricia. "The Strange Case of Addiction in Robert Louis Stevenson's Strange Case of Dr. Jekyll and Mr. Hyde." *Victorian Review* 38.1 (2012):113-31. *JSTOR*. Web. 16 Apr. 2019.

- Condorcet, Marquis de. "Sketch for a Historical Picture of the Progress of the Human Mind: Tenth Epoch." Trans. Keith Michael Baker. *Daedalus* 133.3 (2004): 65–82. *JSTOR*, Web. 11 Nov. 2018.
- Cruea, Susan M. "Changing Ideals of Womanhood During the Nineteenth-Century Woman Movement." *General Studies Writing Faculty Publications*. 19.3 (2005): 187-204. Web. 15 May. 2019.
- Danahay, Martin A. "Introduction." *Strange Case of Dr Jekyll and Mr Hyde*. Robert Louis Stevenson. Ontario: Broadview Editions, 2015. 11-26. Print.
- ---. "Dr. Jekyll's Two Bodies." *Nineteenth-Century Contexts* 35.1 (2013): 23-40. *Taylor & Francis Online*. 04 Mar 2013. Web. 19 Feb. 2019.
- Darwin, Charles. On the Origin of Species by Means of Natural Selection. 1859. Ed. Joseph Carroll. Toronto: Broadview Press, 2003. Print.
- ---. The Descent of Man and Selection in Relation to Sex. 1871. NJ: Princeton University Press, 1981, Print.
- Davis, Michael. "Incongruous Compounds: Re-Reading Jekyll and Hyde and Late Victorian Psychology." *Journal of Victorian Culture* 11.2 (2006): 207-25. *Oxford Academic*. 1 Jan. 2006. Web. 14 Dec. 2018.
- DeLong, Anne. Classic Horror: A Historical Exploration of Literature. California: ABC-CLIO, 2018. Print.
- Derrida, Jacques, and Elisabeth Roudinesco. For What Tomorrow: A Dialogue. Stanford: Calif: Stanford UP, 2004. 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. *Edinburgh University Press Journals*. Oct. 2012 Web. 4 Oct. 2018.
- Draaisma, Douwe. *Metaphors of Memory: A History of Ideas about the Mind.* Cambridge, UK: Cambridge University Press, 2000. Print.
- Drăgan, Simona. "Abnormality, Deformity, Monstrosity: Body Transgressions in Contemporary Visual Culture." *Studies in Visual Arts and Communication: An International Journal* 3.1 (2016): 1-10. *Studies in Visual Arts and Communication*. Web. 20 Oct. 2018.
- Eagleton, Terry. On Evil. New Haven and London: Yale University Press, 2010. Print.
- Emden, Christian J. "Agency without Humans: Normativity and Path Dependence in the Nineteenth Century Life Sciences." *Posthumanism in the Age of Humanism: Mind, Matter, and the Life Sciences after Kant.* Ed. Landgraf, Edgar, et al. Newyork: Bloomsbury Academic, 2019. 53-77. Print.
- Farber, Paul Lawrence. *The Temptations of Evolutionary Ethics*. Berkley: University of California Press, 1994. Print.

- Ferrando, Francesca. "Posthumanism, Transhumanism, Antihumanism, Metahumanism, and New Materialisms Differences and Relations." *Existenz* 8.2 (2013): 26-32. *Research Gate* Mar. 2014. Web. 8 Sep. 2018.
- "Fin de Siécle." Def.1. Oxford Dictionaries. Oxford University Press, n.d. Web. 14 Sept. 2018.
- FM-2030. Are You Transhuman? Monitoring and Stimulating Your Personal Rate of Growth in a Rapidly Changing World. New York: Warner Books. 1989. Print.
- ---. Posthumanism: A Critical Analysis. London: Bloomsbury, 2013. Print.
- "Galvanism." Def.1. Oxford Dictionaries. Oxford University Press, n.d. Web. 24 Sept. 2018.
- Germanà, Monica. "Becoming Hyde: Excess, Pleasure and Cloning." *Gothic Studies* 13.2 (2018): 98-115. Web. 8 Apr. 2019.
- Gill, Miranda. *Eccentricity and the Cultural Imagination in Nineteenth-Century Paris*. Oxford: Oxford UP, 2009. Print.
- Gilmore, David D. Monsters: Evil Beings, Mythical Beasts, and All Manner of Imaginary Terrors. Pennsylvania: University of Pennsylvania Press, 2003. Print.
- Gish. Nancy K. "Jekyll and Hyde: The Psychology of Dissociation." *International Journal of Scottish Literature* 2 (Spring/Summer 2007): 58-67. Web. 16 May. 2019.
- Glick, Thomas F. and David Kohn. ed. *On Evolution: The Development of the Theory of Natural Selection*. Indianapolis: Hackett Publishing, 1996. Print.
- Goetsch, Paul. Monster in English Literature: From the Romantic Age to the First World War. Frankfurt: Peter Lang, 2002. Print.
- Goins, Sarah. "Eugenics and the Strange Case of Dr. Jekyll and Mr. Hyde." *Hog Creek Review*. Lima and Ohio: The Ohio State University at Lima, 2005. *Ohio State University Knowledge Bank*. 16 Nov. 2016. Web. 14 May. 2019.
- Goodbody, Axel. "Ecocritical Theory: Romantic Roots and Impulses from Twentieth-Century European Thinkers." *The Cambridge Companion to Literature and the Environment*. Ed. Luise Westling. New York: Cambridge University Press, 2014. 61-74. Print.
- Gordjin, Bert and Ruth Chadwick. Introduction. *Medical Enhancement and Posthumanity*. Ed. Gordjin, Bert and Ruth Chadwick. N.p.: Springer, 2008. 1-8. Print.
- Goss, Theodora E. *The Monster in the Mirror: Late Victorian Gothic and Anthropology*. Diss. Boston University, 2012. Ann Harbor: UMI, 2012. Print.

- Gould, Stephen Jay. "Post-Darwinian Theories of the Ape Within." *Strange Case of Dr. Jekyll and Mr. Hyde*. Ed. Katherine Linehan. New York: W. W. Norton & Company, 2003. 132-34. Print.
- Graham, Elaine L. Representations of the Post/human: Monsters, Aliens and Others in Popular Culture. Manchester: Manchester UP, 2002. Print.
- Grantham, Michael. *The Transhuman Antihero: Paradoxical Protagonists of Speculative Fiction from Mary Shelley to Richard Morgan*. North Carolina: Jefferson, McFarland & Company, 2015. Print.
- Greenslade, William. *Degeneration, Culture and the Novel 1880-1940*. Cambridge: Cambridge UP, 1994. Print.
- Gordon, Rae Beth. *Dances with Darwin, 1875-1910: Vernacular Modernity in France.* Farnham: Ashgate Publishing, 2009. Print.
- Grosz, Elizabeth. *The Nick of Time: Politics, Evolution, and the Untimely.* Durham: Duke UP, 2004. Print.
- Hack, Brian E. "Weakness is a Crime: Captain America and the Eugenic Ideal in Early Twentieth-Century America." *Captain America and the Struggle of the Superhero: Critical Essays*. Ed. Robert G. Weiner. Jefferson, NC: McFarland, 2009. 79-90. Print.
- Halberstam, Judith. Skin Shows: Gothic Horror and the Technology of Monsters. Duke UP, 1995. Print.
- Halberstam, Judith and Ira Livingston. "Introduction: Posthuman Bodies." *Posthuman Bodies*. Ed. Judith Halberstam and Ira Livingston. Bloomington: Indiana UP, 1995. Print.
- Haraway, Donna J. The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others. New York: Routledge, 1992. Print.
- ---. When Species Meet. Ed. Cary Wolfe. Minneapolis and London: U of Minnesota, 2008. Print.
- Harrison, Gary and William L. Gannon. "Victor Frankenstein's Institutional Review Board Proposal, 1790." *Science and Engineering Ethics* 21.5 (2015): 1139-57. *Springer*, 14. Sep. 2014. Web. 20 Oct. 2018.
- Hassan, Ihab. "Prometheus as Performer: Toward a Posthumanist Culture?" *The Georgia Review* 31. 4 (1977) 830–850. *JSTOR*, Web. 16 Jan. 2019.
- Hayles, N. Katherine. How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics. Chicago: The University of Chicago Press, 1999. Print.
- Heiland, Donna. *Gothic and Gender: An Introduction*. Bodmin: Blackwell Publishers, 2005. Print.

- Hendershot, Cyndy K. *The Animal Within: Masculinity and the Gothic*. Ann Arbor: U of Michigan, 1998. Print.
- Herbrechter, Stefan "Stefan Herbrechter Interview." Interview by Jerome Garbrah. *Genalogy of the Posthuman*. Nov. 2013. Web. 16 Sep. 2018.
- ---. Posthumanism: A Critical Analysis. London: Bloomsbury. 2013. Print.
- Höglund, Johan. "Mrs Musgrave's Stain of Madness: Marsh and the Female Offender." *Richard Marsh, Popular Fiction and Literary Culture, 1890-1915: Rereading the Fin de Siècle.* Ed. Victoria Margree, Daniel Orrells, Minna Vuohelainen. Manchester: Manchester UP, 2018. 45-62. Print.
- Holman Jones, S. and A. Harris. "Monsters, Desire and the Creative Queer Body." *Continuum* 30.5 (2016): 518-530. 16 Jul. 2016. *Taylor & Francis Online*. Web. 4 Aug. 2018.
- Holmes, Richard. "Humphry Davy and the Chemical Moment." *Clinical Chemistry* 57.11 (2011): 1625-31. Web. 10 Oct. 2018.
- Hopkins, Patrick D. "A Moral Vision for Transhumanism." *Journal of Evolution and Technology* 19.1 (2008): 3-7 *Institute for Ethics & Emerging Technologies*. Sep. 2008. Web. 5 Jan. 2018.
- Höffe, Otfried. "Homo Sapiens, Animal Morabile A Sketch of a Philosophical Moral Anthropology." *Evolution and the Future Anthropology, Ethics, Religion*. Ed. Stefan L. Sorgner and Branka-Rista Jovanovic. Frankfurt: Peter Lang, 2013. 35-48. Print.
- Hurley, Kelly. *The Gothic Body: Sexuality, Materialism, and Degeneration at the fin de siècle.* Cambridge: Cambridge UP, 2004. Print.
- Huxley, Julian. *New Bottles for New Wine*. London: Chatto and Windus, 1957. *Archive.org*. 22 May. 2015. Web. 15 Jan. 2019.
- "Identity." Def.1. Oxford Dictionaries. Oxford University Press, n.d. Web. 20 Jan. 2019.
- Jalava, Jarkko. "The Modern Degenerate: Nineteenth-century Degeneration Theory and Modern Psychopathy Research." *Theory & Psychology* 16.3 (2006): 416–432. *SAGE Journals*. Web. 4 Oct. 2018.
- "Juggernaut." Def.1. Oxford Dictionaries. Oxford University Press, n.d. Web. 24 Sept. 2018
- Kearney, Richard. Strangers, Gods and Monsters: Interpreting Otherness. London: Routledge, 2003. Print.
- Koehn, Daryl. *The Nature of Evil*. New York: Palgrave Macmillan, 2005. Print.
- Krischel, Matthis. "Electricity in 19th Century Medicine and Mary Shelley's *Frankenstein*." *AUANews* 16.1 (2011): 20-21. *EBSCO*. Web. 7 Nov. 2018.

- Kurzweil, Ray. The Singularity Is Near. London: Penguin, 2005. Print.
- Lankester, E. Ray. *Degeneration: A Chapter in Darwinism*. London: Macmillan, 1880. *Archive.org*. 16 Apr. 2008. Web. 14 Oct. 2018.
- Levine, George. "The Ambiguous Heritage of Frankenstein." Critical Essays on Mary Wollstonecraft Shelley. Ed. Mary Lowe-Evans. New York: G.K. Hall, 1998. 25-38. Print.
- Loeffler, John. "The Transhuman Revolution: What it is and How to Prepare for its Arrival." *Interesting Engineering*. Interesting Engineering, 16 Nov. 2018. Web. 2 June 2019.
- Lombroso, Cesare. *Criminal Man*. Ed. Gibson Mary and Nicole Hahn Rafter. Durham and London: Duke UP, 2006. Print.
- Mahon, Peter. *Posthumanism: A Guide for the Perplexed.* New York: Bloomsbury, 2017. Print.
- Maixner, Paul. Robert Louis Stevenson: The Critical Heritage. London: Routledge, 1998. Print.
- McLane, Maureen Noelle. "Literate Species: Populations, 'Humanities,' and Frankenstein." ELH 63.4 (1996): 959–988. JSTOR, Web. 5 Nov. 2018.
- McLean, Ralph. *The Enlightenment*. Coventry: History at the Higher Education Academy, 2010. Print.
- Mousley, Andy. "The Posthuman." *The Cambridge Companion to Frankenstein*. Ed. Andrew Smith. Cambridge: Cambridge UP, 2016. 158-72. Print.
- Mellor, Anne K. "Making a "monster": An Introduction to *Frankenstein*." *The Cambridge Companion to Mary Shelley*. Ed. Esther Schor. Cambridge, UK: Cambridge UP, 2003. 9-25. Print.
- ---. Mary Shelley: Her Life, Her Fiction, Her Monsters. London: Routledge, 2009. Print.
- Merola, Nicole M. "T. C. Boyle's Neoevolutionary Queer Ecologies: Questioning Species in 'Descent of Man' and 'Dogology." *America's Darwin: Darwinian Theory and U. S. Literary Culture*. Ed. Tina Gianquitto and Lydia Fisher. U of Georgia, 2014. 333-59. Print.
- Meyer, Jürgen. "Surgical Engineering in the Nineteenth Century: Frankenstein, The Island of Dr. Moreau, Flatland." Unmapped Countries: Biological Visions in Nineteenth Century Literature and Culture. Ed. Anne J. Zwierlein. London: Anthem Press, 2005. 173-82. Print.
- Miah, Andy. "A Critical History of Posthumanism." *Medical Enhancement and Posthumanity*. Ed. Gordjin, Bert and Ruth Chadwick. N.p.: Springer, 2008. 71-94. Print.

- Mitchell, Piers D. et al. "The Study of Anatomy in England from 1700 to the Early 20th Century." *Journal of Anatomy* 219.2 (2011): 91–9. *PMC*. 18 Apr. 2011. Web. 14 Sep. 2018.
- "Monster." Def. 1. Oxford Dictionaries. Oxford University Press, n.d. Web. 8 Nov. 2019.
- "Monstrous." Def. 2. Oxford Dictionaries. Oxford University Press, n.d. Web. 24 May. 2019.
- Manzocco, Roberto. Transhumanism Engineering the Human Condition: History, Philosophy and Current Status. Switzerland: Springer, 2019. Print.
- Mulkay, Michael. "Frankenstein and the Debate over Embryo Research." Science, Technology, & Human Values 21.2 (1996): 157-76. JSTOR. Web. 21 May. 2019.
- "Nadir." Def.1. Oxford Dictionaries. Oxford University Press, n.d. Web. 12 May. 2019.
- Nayar, Pramod K. Posthumanism. Cambridge and Malden: Polity Press, 2014. Print.
- ---. "Our Monsters, Ourselves." *Telangana Today*. [Haydarabad], 11 Nov. 2018: 8. *Academia.edu*. Web. 5 Oct. 2018.
- Newman, William R. *Promethean Ambitions: Alchemy and the Quest to Perfect Nature*. Chicago: The University of Chicago Press, 2005. Print.
- Nordau, Max Simon. *Degeneration*. New York: D. Appleton and Company, 1895. *Archive.org*. 10 Jul. 2013. Web. 14 Feb. 2019.
- O'Neil, Dennis. "Early Transitional Humans." N.d. Palomar.edu. Web. 04 Jan. 2019.
- Ortiz-Robles, Mario. "Liminanimal: The Monster in Late Victorian Gothic Fiction." European Journal of English Studies, 19.1 (2015): 10–23. Taylor & Francis Online. 12 Mar. 2015 Web. 14 May. 2019.
- Oswald, Dana. "Monstrous Gender: Geographies of Ambiguity." *The Ashgate Research Companion to Monsters and the Monstrous*. Ed. Asa Mittman and Peter J. Dendle. 2012. 343-363. Print.
- Otis, Laura, ed. *Literature and Science in the Nineteenth Century: An Anthology*. New York: Oxford UP, 2002. Print.
- Pamboukian, Sylvia. "The Monstrous Hero: Medicine and Monster-making in Late Victorian Literature." *Dark Reflections, Monstrous Reflections: Essays on the Monster in Culture.* Ed. Sorcha Ni Fhlainn. Oxford: Inter-Disciplinary Press, 2008, 235-345. Print.
- Pepperell, Robert. "The Posthuman Manifesto." *Kritikos* 2 (2005): 1-15. Web. 14 Mar. 2019.
- ---. The Posthuman Condition: Consciousness Beyond the Brain. Bristol: Intellect, 2003. Print.

- Peters, Ted. "Playing God with Frankenstein." Theology and Science 16.2 (2018): 145-150. Taylor & Francis Online. 2 Apr. 2018 Web. 5 Sep. 2018.
- Pick, Daniel. Faces of Degeneration: A European Disorder, c. 1848-1918. Cambridge: Cambridge UP, 1989. Print.
- Punter, David, and Glennis Byron. *The Gothic*. Chichester: Blackwell Publishing, 2004. Print.
- Pykett, Lynn. ed. Reading Fin de Siècle Fictions. New York: Longman, 1996. Print.
- Ranish, Robert and Stefan Lorenz Sorgner. "Introducing Post- and Transhumanism." *Post- and Transhumanism: An Introduction*. Ed. Ranish, Robert and Stefan Lorenz Sorgner. Frankfurt am Main: Peter Lang, 2014. 7-27. Print.
- Regal, Brian. *Human Evolution: A Guide to the Debates*. Santa Barbara, California: ABC-CLIO, 2004. Print.
- Reid, Julia. *Robert Louis Stevenson, Science, and the Fin de Siècle*. Hound mills, Basingstoke: Palgrave Macmillan, 2006. Print.
- Richards, Robert J. "Why Darwin Delayed, or Interesting Problems and Models in the History of Science." *Journal of the History of the Behavioural Sciences*. 19.1 (1983): 45-53. *Wiley Online Library*. Web. 12 Dec. 2018.
- ---. Darwin and the Emergence of Evolutionary Theories of Mind and Behaviour. Chicago: U of Chicago, 1989. Print.
- Richter, Virginia. Literature after Darwin: Human Beasts in Western Fiction 1859-1939. UK: Palgrave Macmillan, 2011. Print.
- Roden, David. *Posthuman Life: Philosophy at the Edge of the Human*. Routledge, 2015. Print.
- ---. "A Defence of Pre-Critical Posthumanism." *Academia.edu.* n. d. Web. 18 May. 2019.
- Rose Cronan, E. "Custody Battles: Reproducing Knowledge about *Frankenstein.*" *New Literary History* 26. 4 (1995): 809-832. *JSTOR*. Web. 16 Jan. 2019.
- Russell, Bertrand. History of Western Philosophy. London: Routledge, 1996. Print.
- Russo, M. Teresa and Nicola Di Stefano. "Posthuman Body and Beauty." *Cuadernos de Bioética* 26.3 (2014): 457-66. Web. 9 Dec. 2018.
- Saler, Benson and Charles A. Ziegler. "Dracula and Carmilla: Monsters and the Mind." *Philosophy and Literature* 29.1 (2005): 218-27. *Project Muse*, Web. 4 May. 2019.
- Sapp, Jan. *The New Foundations of Evolution: On the Tree of Life*. Oxford: Oxford UP, 2009. Print.

- Sawday, Jonathan. *The Body Emblazoned: Dissection and the Human Body in Renaissance*. New York: Routledge, 2013. Print.
- Schoch, Sara. "Gothic Monsters and Masculinity: Neutralising the New Woman in Victorian Gothic Literature." *Explorations: The UC Davis Undergraduate Research Journal*, 15 (2012): 1-15. *University of California. Davis*. Web. 7 Mar. 2019.
- Schwartz, Joel S. "Darwin, Wallace, and Huxley, and 'Vestiges of the Natural History of Creation." *Journal of the History of Biology* 23.1 (1990): 127-153. *JSTOR*. Web. 10 Mar. 2019.
- Shakeshaft, R. M. James. "Finding the 'Human' in the 'Posthuman': The Representation of the Technologically Enhanced Posthuman in Young Adult fiction." Diss. University of Cambridge, 2018. *University of Cambridge Repository* Web. 12 Mar. 2019.
- Sheehan, Paul. "Posthuman Bodies." *The Cambridge Companion to the Body in Literature*. Ed. David Hillman and Ulrika Maude. New York: Cambridge UP, 2015. 245-60 Print.
- Shildrick, Margrit. *Embodying the Monster: Encounters with the Vulnerable Self.* London: Sage Publishing, 2002. Print.
- Smeele, Wietske. The Victorian Posthuman: Monstrous Bodies in Literature and Science. Diss. Vanderbilt University, 2018. Vanderbilt University Electronic Theses and Dissertations. Web. 4 Mar. 2019.
- Smith, Alan Lloyd. *American Gothic Fiction: An Introduction*. New York: Continuum, 2004. Print.
- Smith, Andrew. "Scientific Contexts." *The Cambridge Companion to Frankenstein*. Ed. Andrew Smith. Cambridge: Cambridge UP, 2016. 69-83. Print.
- Sorgner, L. Stefan and Nicola Grimm. "Introduction: Evolution Today." *Evolution and the Future Anthropology, Ethics, Religion*. Ed. Stefan L. Sorgner and Branka-Rista Jovanovic. Frankfurt: Peter Lang, 2013. 9-20. Print.
- Steinhoff, James. "Transhumanism and Marxism: Philosophical Connections." *Journal of Evolution and Technology* 24.2 (2014): 1-16. *Institute for Ethics and Emerging Technologies*. Web. 12 Feb. 2019.
- Stevenson, Robert Louis. "Truth of Intercourse." *The Lantern-Bearers and Other Essays*. Ed. Jeremy Treglown. New York: Cooper Square Press, 1999. 93-9. Print.
- Stiles, Anne. "Robert Louis Stevenson's 'Jekyll and Hyde' and the Double Brain." *Studies in English Literature*, 1500-1900 46.4 (2006): 879–900. *JSTOR*, Web. 15 Febr. 2019.
- Thomson, J. Arthur. "Atavism." *Encyclopaedia of Religion and Ethics*. Ed. J. Hastings. Edinburgh: T. & T. Clark, 1909. Web. *Archive.org*. 12. Mar. 2019.

- "Troglodyte." Def.1. Oxford Dictionaries. Oxford University Press, n.d. Web. 4 May. 2019.
- Turney, Jon. Frankenstein's Footsteps: Science, Genetics, and Popular Culture. New Haven: Yale University Press, 1998. Print.
- Van Pelt, Tamise. "Lacan in Context: An Introduction to Lacan for the English-Speaking Reader." *College Literature* 24. 2 (1997): 57–70. *JSTOR*, Web. 8 Feb. 2019.
- Villa, M. C. Sánchez. "Monsters of an Awakened Reason: The Influence of the Biblical Account in the Development of the Scientific Theories on the Origin of Man and Its Variations." *Culture & History Digital Journal*, 6.1 (2017): 1-12. *CSIC*, Web. 14. Mar 2019.
- "What Darwin Believed." New England Complex Systems Institute. N.p.,n.d. Web. 02.07.2019.
- "What Lamarck Believed." *New England Complex Systems Institute*. N.p.,n.d. Web. 02.07.2019.
- Wasson, Sara. "Useful Darkness: Intersections between Medical Humanities and Gothic Studies." *Gothic Studies* 17.1 (2015): 1-20. *Research Gate*. Web 16 Oct. 2018.
- Watts, Ruth. "Education, Empire and Social Change in Nineteenth Century England." *Paedagogica Historica* 45.6 (2009): 773-786. Web. 4 Feb. 2019.
- Wayne, Randy. *Plant Cell Biology: From Astronomy to Zoology*. London, United Kingdom: Academic Press, 2019. Print.
- Wells, Herbert. G. "Human Evolution, An Artificial Process." H. G. Wells: Early Writings in Science and Science Fiction. Ed. Robert M. Philmus and David Y. Hughes. California: U of California, 1975. 210-19. Print.
- Wennemann, Daryl J. "The Concept of the Posthuman: Chain of Being or Conceptual Saltus?" *Journal of Evolution and Technology* 26.2 (2016): 16-30. *Institute for Ethics & Emerging Technologies*. Web. 8 Feb. 2019.
- Wilson, Elizabeth A. Neural Geographies: Feminism and the Microstructure of Cognition. New York: Routledge, 1998. Print.
- Wilson, Walter J. "Virchow's Contribution to the Cell Theory." *Journal of the History of Medicine and Allied Sciences* 2.2 (1947): 163–178. *JSTOR*. Web. 16 Jan. 2019.
- Wolfe, Cary and Natasha Lennard. "Is Humanism Really Humane?" *The New York Times*. The New York Times, 09 Jan. 2017. Web. 08 Feb. 2019.
- Wolfe, Cary. What Is Posthumanism? Minneapolis: U of Minnesota, 2010. Print.

- Wright, Daniel L. "The Prisonhouse of my Disposition': A Study of the Psychology of Addiction in Dr. Jekyll and Mr. Hyde." *Studies in the Novel* 26 (1994): 254-67. *Research Gate.* Web. 16 Feb. 2019.
- Youngquist, Paul. *Monstrosities: Bodies and British Romanticism*. Minneapolis: U of Minnesota, 2003. Print.
- Zachar, Peter, and Robert F. Krueger. "Personality Disorder and Validity: A History of Controversy." *The Oxford Handbook of Philosophy and Psychiatry*. Oxford: Oxford UP, 2013. 247-87. Print.
- Zalloua, Zahi. "Posthumanism." *The Bloomsbury Handbook of Literary and Cultural Theory*. Ed. Jeffrey R. Di Leo. London: Bloomsbury, 2019. 310-22. Print.

APPX.1 ORIGINALITY REPORT



HACETTEPE ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ YÜKSEK LİSANS TEZ ÇALIŞMASI ORİJİNALLİK RAPORU

HACETTEPE ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ İNGİLİZ DİLİ VE EDEBİYATI ANABİLİM DALI BAŞKANLIĞI'NA

Tarih: 09/07/2019

Tez Başlığı : Mary Shelley'nin *Frankenstein* ve Robert Louis Stevenson'un *Dr. Jekyll ve Mr. Hyde'ın Tuhaf Hikayesi* Romanlarındaki İnsan ve Canavar Kavramı

Yukarıda başlığı gösterilen tez çalışmamın a) Kapak sayfası, b) Giriş, c) Ana bölümler ve d) Sonuç kısımlarından oluşan toplam 105 sayfalık kısmına ilişkin, 09/07/2019 tarihinde şahsım/tez danışmanım tarafından Tumitin adlı intihal tespit programından aşağıda işaretlenmiş filtrelemeler uygulanarak alınmış olan orijinallik raporuna göre, tezimin benzerlik oranı % 4 'tür.

Uygulanan filtrelemeler:

- 1- Kabul/Onay ve Bildirim sayfaları hariç
- 2- Kaynakça hariç
- 3- Alıntılar hariç
- 4- Alıntılar dâhil
- 5- 5 kelimeden daha az örtüşme içeren metin kısımları hariç

Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Tez Çalışması Orijinallik Raporu Alınması ve Kullanılması Uygulama Esasları'nı inceledim ve bu Uygulama Esasları'nda belirtilen azami benzerlik oranlarına göre tez çalışmamın herhangi bir intihal içermediğini; aksinin tespit edileceği muhtemel durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.

Gereğini saygılarımla arz ederim.

Tarih ve İmza

.2019

Adı Soyadı:

ESRA ERDEM

N152244433

Anabilim Dalı:

İNGİLİZ DİLİ VEDEBİYATI

Programı:

Öğrenci No:

İNGİLİZ KÜLTÜR ARAŞTIRMALARI

DANIŞMAN ONAYI

UYGUNDUR

Dr. Öğretim Üyesi Alev KARADUMAN



HACETTEPE UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCES MASTER'S THESIS ORIGINALITY REPORT

HACETTEPE UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCES ENGLISH ALANGUAGE AND LITERATURE DEPARTMENT

Date: 09/07/2019

Thesis Title: The Concept of Human and Monster in Mary Shelley's Frankenstein and Robert Louis Stevenson's The Strange Case of Dr. Jekyll and Mr. Hyde

According to the originality report obtained by myself/my thesis advisor by using the Turnitin plagiarism detection software and by applying the filtering options checked below on 09/07/2019 for the total of 105 pages including the a) Title Page, b) Introduction, c) Main Chapters, and d) Conclusion sections of my thesis entitled as above, the similarity index of my thesis is 4 %.

Filtering options applied:

- 1. Approval and Decleration sections excluded
- 2. Bibliography/Works Cited excluded
- 3. Quotes excluded
- 4. Quotes included
- 5. Match size up to 5 words excluded

I declare that I have carefully read Hacettepe University Graduate School of Social Sciences Guidelines for Obtaining and Using Thesis Originality Reports; that according to the maximum similarity index values specified in the Guidelines, my thesis does not include any form of plagiarism; that in any future detection of possible infringement of the regulations I accept all legal responsibility; and that all the information I have provided is correct to the best of my knowledge.

I respectfully submit this for approval.

Date and Signature

Name Surname:

ESRA ERDEM

Student No:

N15224433

Department:

ENGLISH LANGUAGE AND LITERATURE

Program:

BRITISH CULTURAL STUDIES

ADVISOR APPROVAL

APPROVED

Assist. Prof. Dr. Alev KARADUMAN

APPX. 2: ETHICS BOARD WAIVER FORMS FOR THESIS WORK



HACETTEPE ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ TEZ CALISMASI ETİK KOMİSYON MUAFİYETİ FORMU

HACETTEPE ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ İNGİLİZ DİLİ VE EDEBİYATI ANABİLİM DALI BAŞKANLIĞI'NA

Tarih:09/07/2019

Tez Başlığı: Mary Shelley'nin *Frankenstein* ve Robert Louis Stevenson'un *Dr. Jekyll ve Mr. Hyde'ın Tuhaf Hikayesi* Romanlarındaki İnsan ve Canavar Kavramı

Yukarıda başlığı gösterilen tez çalışmam:

- 1. İnsan ve hayvan üzerinde deney niteliği taşımamaktadır,
- 2. Biyolojik materyal (kan, idrar vb. biyolojik sıvılar ve numuneler) kullanılmasını gerektirmemektedir.
- 3. Beden bütünlüğüne müdahale içermemektedir.
- Gözlemsel ve betimsel araştırma (anket, mülakat, ölçek/skala çalışmaları, dosya taramaları, veri kaynakları taraması, sistem-model geliştirme çalışmaları) niteliğinde değildir.

Hacettepe Üniversitesi Etik Kurullar ve Komisyonlarının Yönergelerini inceledim ve bunlara göre tez çalışmamın yürütülebilmesi için herhangi bir Etik Kurul/Komisyon'dan izin alınmasına gerek olmadığını; aksi durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.

Gereğini saygılarımla arz ederim.

Tarih ve İmza

09.07 2019

Adı Soyadı: Esra ERDEM

Öğrenci No: N15224433

Anabilim Dalı: İngiliz Dili ve Edebiyatı

Programı: İngiliz Kültür Araştırmaları

Statüsü: Yüksek Lisans Doktora Bütünleşik Doktora

DANIŞMAN GÖRÜŞÜ VE ONAYI

Telefon: 0-312-2976860

Dr. Öğretim Üyesi Alev KARADUMAN

Detaylı Bilgi: http://www.sosyalbilimler.hacettepe.edu.tr

Faks: 0-3122992147 E-posta: sosyalbilimler@hacettepe.edu.tr



HACETTEPE UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCES ETHICS COMMISSION FORM FOR THESIS

HACETTEPE UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCES ENGLISH LANGUAGE AND LITERATURE DEPARTMENT

Date: 09/07/2019

Thesis Title: The Concept of Human and Monster in Mary Shelley's Frankenstein and Robert Louis Stevenson's The Strange Case of Dr. Jekyll and Mr. Hyde

My thesis work related to the title above:

- 1. Does not perform experimentation on animals or people.
- 2. Does not necessitate the use of biological material (blood, urine, biological fluids and samples, etc.).
- 3. Does not involve any interference of the body's integrity.
- 4. Is not based on observational and descriptive research (survey, interview, measures/scales, data scanning, system-model development).

I declare, I have carefully read Hacettepe University's Ethics Regulations and the Commission's Guidelines, and in order to proceed with my thesis according to these regulations I do not have to get permission from the Ethics Board/Commission for anything; in any infringement of the regulations I accept all legal responsibility and I declare that all the information I have provided is true.

I respectfully submit this for approval.

Date and Signature

ADVISER COMMENTS AND APPROVAL

Assist. Prof. Dr. Alev KARADUMAN